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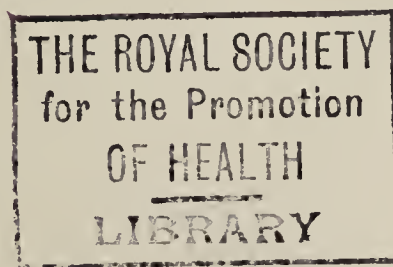
1955

NEW SOUTH WALES



REPORT
OF THE
DIRECTOR-GENERAL
OF
PUBLIC HEALTH
NEW SOUTH WALES

1947



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DEPARTMENT OF PUBLIC HEALTH, NEW SOUTH WALES.

Office of the Director-General of Public Health,
93 Macquarie-street and 52 Bridge-street, Sydney.
Members of the State Board of Health, 1947.

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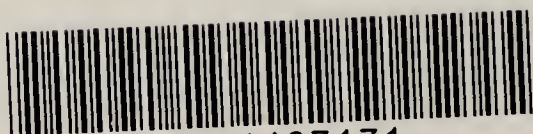
Divisions and Branches.

The following divisions are controlled by the Director-General of Public Health:—Maternal and Baby Welfare; Tuberculosis; Social Hygiene; Industrial Hygiene; Government Medical Officers for Sydney; Medical Officers of Health, Metropolitan, Newcastle, South Coast, Mitchell, Richmond-Tweed and Broken Hill Districts, Microbiological Laboratory, Chemical Laboratory; Health Education; Pure Food; Sanitation, etc.

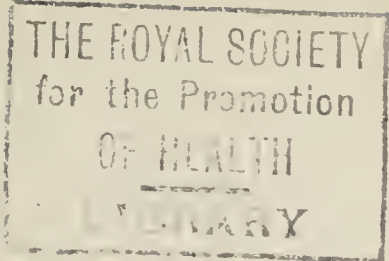
The Hospital Division comprises The David Berry Hospital, three State Hospitals and Homes, Waterfall Sanatorium (Tuberculosis) and Auxiliary at Randwick, Strickland Convalescent Hospital, Vaucluse.

Legislative Enactments.

The Minister of Health is charged with the administration of the following Acts, for the promotion of the Public Health, execution of which is left to the Director-General of Public Health and the staff working under his control:—Cattle Slaughtering and Diseased Animal and Meat Acts, 1902-1932; Food Preservation by Sulphur Dioxide Enabling Act, 1920; Noxious Trades Act, 1902; Private Hospitals Act, 1908; Public Health Acts, 1902-1944; Pure Food Act, 1908; King George V and Queen Mary Maternal and Infant Welfare Foundation Act, 1937. Burials in closed cemeteries and the exhumation of bodies for the purpose of re-interment, etc., are also dealt with.



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Report of the Director-General of Public Health to the Honorable the Minister for Health (the Hon. C. A. Kelly, M.L.A.)

SIR,

I have the honour to present my report on the work of this Office for the year ended 31st December, 1947.

Vital Statistics.

Vital statistics of New South Wales for the year 1947 have been prepared by the Government Statistician, Mr. S. R. Carver. The population at the end of 1947 was 3,007,582, the total increase for the year being 34,650. The mean population was 2,985,073. Live births numbered 69,398, equivalent to 23.25 per 1,000 of population, which is 12 per cent. above the average of the previous five years. The number of still births registered was 1,466. Deaths during the year numbered 28,449, equivalent to a rate of 9.53 per 1,000 of population. This rate is 0.2 per cent. below the average of the previous five years. The number of children under 1 year of age who died was 2,069, equivalent to 29.81 per 1,000 live births. (Metropolitan rate was 26.82 per 1,000 live births; remainder of the State rate was 32.36 per 1,000 live births.) The rate for 1947 is 10 per cent. below the average for the previous five years.

Infectious Diseases.

Typhoid Fever.—In 1947 there were 28 cases notified and no deaths. The incidence of this disease was slightly higher than in 1946, when there were 25 cases and 3 deaths.

Scarlet Fever.—1,540 notified cases and 2 deaths, a decrease of 1,550 cases and 2 deaths as compared with 1946.

Diphtheria.—761 notified cases and 49 deaths in comparison with 1,279 cases and 57 deaths in 1946.

Infantile Paralysis.—83 cases were notified, 573 cases less than in 1946.

Tuberculosis Division.

The Director of the Tuberculosis Division reports that 1,751 cases of pulmonary tuberculosis were notified in 1947, an increase of 80 cases compared with 1946. An increase in radiological activities of the Chest Clinics was doubtless a factor in the detection of additional cases.

Deaths from all forms of tuberculosis numbered 865, giving a tuberculosis death rate of 37.53 per 100,000 of population, a slight rise on that for 1946.

Eight Clinics were in operation during the year. Compared with 1946 there was a marked increase in 1947 of radiological examinations at Clinics and by private radiologists in the group service which remains very popular with the general public.

Division of Social Hygiene.

Notifications of venereal disease showed a decline in 1947 of 390 as compared with 1946. The major fall was in notifications of gonorrhea. The increased percentage of new syphilitic infections coming under notice is disturbing, although the incidence of syphilis in New South Wales is not high.

A daily average of 50 prophylactic treatments were given at the divisional clinic, showing that the facilities for prophylaxis are being increasingly used. 79.3 per cent. of the total of 84,202 treatment attendances for males at clinics represents attendances at the divisional clinic.

Consultative Council for Physically Handicapped Persons.

The Consultative Council for Physically Handicapped Persons has continued to investigate and assist in matters relating to the treatment and after-care of poliomyelitis patients, and to arrange for vocational training of other physically handicapped persons.

Of the 78 cases of poliomyelitis notified during the year, 55 had some form of paralysis and these cases have been followed up by circularizing medical practitioners, hospitals and patients and by personal visits of the almoner and medical officer.

In addition to the after-care of poliomyelitis cases four persons physically handicapped from other causes were receiving vocational training at the end of 1947. Such trainees are limited to those from the metropolitan area because of lack of accommodation, but the Council is endeavouring to find a property suitable for a hostel to accommodate trainees from the country.

Bureau of Microbiology.

The total number of general laboratory examinations carried out during the year was 75,961. This represents a decrease in the number of examinations of 29,454 compared with the year 1946, but is in close agreement with the average number of examinations carried out in the previous five years. The largest part of this decrease was due to a marked decrease in the number of serological tests for venereal diseases. The work of the Biochemical Section is steadily increasing and the Director again emphasises that the efficiency of the laboratory is greatly hampered by the overcrowded working conditions.

Division of Industrial Hygiene.

The Director of the Division of Industrial Hygiene proceeded overseas in May, 1947, on a fellowship granted by the National Health and Medical Research Council of Australia. The Director made inquiries into numerous aspects of the industrial hygiene services of Great Britain, Canada and the United States of America.

Further work has been carried out in the investigation of chemical and pathological conditions found in the lungs of coal miners.

Ventilation investigations and dust sampling of coal and metalliferous mines were carried out and various investigations in other dusty trades are described in the report.

Two hundred and twenty persons were examined in regard to lead poisoning, and industrial hazards from other fumes and gases were investigated.

Among the investigations of cases of dermatitis it was found that hairs from larvae of Tussock Moths were responsible for the skin irritation experienced by a group of building labourers working in recently cleared bushland.

Division of Maternal and Baby Welfare.

The total attendances of mothers at prenatal clinics was slightly less this year than last due mainly to the closing of the Newtown Clinic which was considered redundant on account of its proximity to King George V Memorial Hospital.

The Special Medical Committee Investigating Maternal mortality has actively continued its work to try to reduce maternal mortality.

There are now 264 Baby Health Centres in the State, of which 71 are in the metropolitan area, 11 in Newcastle and 182 in other parts of the State. Mothers are also encouraged to bring their pre-school children to these centres at intervals for supervision. In addition, 14 Day Nurseries and Nursery Schools and 22 Kindergartens have been supervised by Medical Officers of this Division during 1947.

The departmental publications "Healthy Motherhood" (50,000 copies printed annually) and "Our Babies" (25,000 copies printed annually) are in increasing demand.

Government Analyst.

The Government Analyst reports 28,612 samples were examined during 1947, an increase of 2,485 samples over those examined during 1946. Of the total, 25,788 samples were examined for the purposes of the administration of the Pure Food Act.

A total of 19,071 milk samples were examined and 2.85 per cent. were found to contravene the standard.

Two thousand seven hundred and sixty-six samples submitted for the Public Services of the State were examined for subsidized institutions, the Government Stores Department, the Police Authorities, and in connection with Coroners' inquiries. Various other authorities including the Defence Authorities submitted samples for analysis.

Food Inspection.

Particular attention is given by the inspectors of this branch to the supervision of the milk supply, to the manufacture of jams, preserving of fruit and vegetables, condiments, small-goods and cordials and to the general condition of grocery, fruit, vegetable, meat and fish shops both wholesale and retail.

During the year all samples tested of cream, ice cream, cordials and jam were found to comply with the standards.

A survey in regard to the bacteriological condition of eating and drinking utensils under existing cleansing methods is still in progress. One hundred and fifty-three establishments have been visited comprising 84 restaurants, 30 milk bars and 39 hotels.

Sanitation Branch.

The shortage of housing accommodation made it inadvisable to recommend the issue of closing orders in other than extreme cases—consequently out of 160 insanitary buildings inspected only 2 closing order certificates were recommended.

During the year the control of slaughtering premises under the Cattle Slaughtering and Diseased Animals and Meat Act, 1902, was transferred to the Department of Agriculture. Officers of this branch have assisted and advised officers of the Agriculture Department during investigations and in matters relating to the Act and its Regulations.

Five hundred and sixty inspections of noxious trades premises were made, and the provisions of the Act were extended to Rylstone Shire, Warren and Wentworth Municipalities.

During the year this Branch supervised the exhumation of 467 bodies of American Servicemen and Women for reburial in the United States of America.

Private Hospitals.

At the end of the year there were 310 licensed private hospitals in New South Wales, having a total of 3,774 beds. In the five-year period 1942-47, the number of private hospitals has decreased by 152, or 32.9 per cent.

Regular inspection of all private hospitals was carried out during the year, and there is still much to be done to overcome the lag in maintenance of these hospitals due to wartime shortages of labour and materials.

No prosecutions were undertaken in 1947, but overcrowding of wards is a common occurrence.

Many justified complaints were received about rest and convalescent homes and legislation to allow the Department to control such places is needed.

Medico-legal Section and Hospital Admission Depot.

The work of this Section of the Department includes the arranging of admission of patients to metropolitan hospitals, State hospitals and homes, convalescent homes, ambulance removals, medical examinations for Government departments, of police recruits and sick police, vaccinations of police and public against smallpox and the varied medico-legal work under the direction of the Government Medical Officer for Sydney.

Health Education.

The funds provided for health education of the public were severely curtailed for the financial year 1947-48 and necessitated the cessation of all press advertising in June, 1947. However, during the first half of the year the programme outlined last year was continued with gratifying results.

Four new publications were issued during the year and others were revised and reprinted.

Active participation in Metropolitan and Country Health Weeks was again a feature of the year's work.

Twenty-seven new 16-mm. films were obtained during the year either by purchase or donation. By agreement with the motion picture industry the Department has begun to implement its new policy of releasing approved 35-mm. films to a large number of theatres in the State.

Nutrition Section.

This Section gives advice to the public in diet and nutrition by medium of newspaper articles, radio talks, lecture tours and demonstrations, etc., in both country and metropolitan areas.

Catering establishments in State and Mental Hospitals and various schools and colleges were investigated and reported on during the year.

Following approval by the Education Department, there has been an extension of nutrition lectures by the dietitians to school children.

School Medical Service.

Medical examination of school children was continued in both metropolitan and country districts.

A total of 1,881 medical examinations of teachers and students for the teaching service were also done during the year.

New cases examined or investigated at the four Child Guidance Clinics totalled 2,462.

Speech therapists continued their work in the schools and at the Speech Therapy Centre.

The extent to which children were affected by the various infectious and contagious diseases is shown in the Director's report.

Dental Services.

During the year the Division of Dental Services was created and placed under the control of a Director. It incorporated two main sections—the School Dental Service and Dental Services to State Hospitals and Homes, and institutions including State Penitentiaries.

Health Districts.

Metropolitan Health District.

The Metropolitan Medical Officer of Health in an abridged report again records a striking reduction in notified cases of diphtheria and states that immunization campaigns against the disease are now accepted regular duties of local authorities.

The Medical Officer of Health stresses again the need for Health Inspectors employed by Local Authorities to adopt active measures to ensure that living conditions of the people are kept at a high hygienic standard.

Hunter River Combined Sanitary District.

The Medical Officer of Health reports that much was done this year to overcome the serious housing shortage in the district.

Departmental Officers completed a sanitary survey of the Greater Newcastle area and unsatisfactory features have been brought to the notice of the City Council. Similar surveys of other areas in the district will follow.

An outbreak of cases of food poisoning from eating prawns was investigated and the help of Officers of the Council for Scientific and Industrial Research was obtained in a survey of the local prawning industry.

South Coast Health District.

The Medical Officer of Health states the number of cases of diphtheria (13) which occurred within the district was the lowest on record. A survey of 52 primary and secondary schools in the district showed that of 10,103 children questioned, 7,664 (75.8 per cent.) had been immunized against diphtheria.

The Department has been successful in getting a number of Local Authorities to employ health inspectors where none were employed before. In other cases the health inspectorial staff of some Authorities has been augmented.

Close supervision of sanitation matters in the district was exercised and it is felt improvement has resulted. A Pure Food Inspector working from the district's headquarters is considered necessary to improve the standard of food hygiene in the district.

Mitchell Health District.

Richmond-Tweed Health District.

Brief reports are made by the respective Medical Officers of Health of the above two districts which were both formally opened on 1st December, 1947.

Broken Hill and District.

The Medical Officer of Health reports a decrease of 200 in the population of the district.

The only notifiable disease of any frequency during the year was scarlet fever (47) and there were 6 cases of diphtheria.

In February the State Laboratory was handed over, together with its equipment, to the control of the Broken Hill and District Hospital.

There was an increase in attendances at the Anti-Tuberculosis Clinic.

E. SYDNEY MORRIS,
Director-General of Public Health,

VITAL STATISTICS OF NEW SOUTH WALES FOR THE YEAR 1947.

(Prepared by the Government Statistician, Mr. S. R. Carver.)

Population.

The population at the end of 1947 was 3,007,582, of whom 1,504,350 were males and 1,503,232 females. During the year the increase by excess of births over deaths was 40,949; the excess of arrivals over departures was 3,701. The total increase for the year was 34,650. The mean population was 2,985,073.

Live Births.

The total number of live births was 69,398, equivalent to 23.25 per 1,000 of population, which is 12 per cent. above the average of the previous five years. Of this number 35,775 were males and 33,623 were females, the proportion being 106 males to 100 females.

Dividing the State into the Metropolis and the remainder of the State, there were 31,918 births in the former and 37,480

in the latter, corresponding to rates of 21.51 and 24.97 respectively.

Stillbirths.

The number of stillbirths registered was 1,466 (826 males and 640 females), which is 2.07 per cent. of all births, live and still, and equal to 0.49 per 1,000 of population. In the Metropolis there were 618 stillbirths and in the Remainder of the State 848, representing 1.90 and 2.21 per cent. of all births, live and still, in the respective divisions.

Deaths.

The deaths during the year numbered 28,449, equivalent to a rate of 9.53 per 1,000 of population. This rate is 0.2 per cent. below the average of the previous five years.

Causes of Death.	Number 1947.	Average Annual Number 1942-46. (a)	Increase (+) or Decrease (—) in 1947. (b)
			per cent.
Typhoid Fever (including Paratyphoid)	...	4	(—) 100
Cerebro-spinal (meningococcal) Meningitis	23	69	(—) 66
Scarlet Fever	2	9	(—) 77
Whooping Cough	29	55	(—) 47
Diphtheria	49	80	(—) 39
Erysipelas	2	6	(—) 67
Tetanus	22	20	(+) 9
Tuberculosis of the Respiratory System	816	888	(—) 8
Tuberculosis of Meninges and Central Nervous System	17	27	(—) 38
Other Tuberculous Diseases	32	48	(—) 33
Dysentery	5	22	(—) 77
Syphilis	129	132	(—) 2
Influenza with respiratory complications specified	45	77	(—) 42
Influenza without respiratory complications specified	34	52	(—) 34
Measles	7	39	(—) 82
Acute Poliomyelitis and Acute Polioencephalitis (notifiable and non-notifiable forms)	10	24	(—) 67
Acute Infectious Encephalitis (lethargic or epidemic) (notifiable and non-notifiable forms)	14	8	(+) 130
Other Infectious and Parasitic Diseases	88	96	(—) 8
Cancer	3,621	3,414	(+) 6
Diabetes Mellitus	507	562	(—) 10
Other General Diseases	360	416	(—) 13
Vitamin-Deficiency Diseases	1	1	(—) 19
Diseases of the Blood	251	232	(+) 8
Chronic Poisoning and Intoxication	60	39	(+) 54
Encephalitis and Meningitis (non-epidemic)	99	117	(—) 15
Cerebral Haemorrhage	2,028	2,031	...
Cerebral Embolism, Thrombosis, Softening and Hemiplegia	884	836	(+) 6
Other Intracranial Effusions	8	11	(—) 28
Infantile Convulsions	4	17	(—) 76
Other Diseases of the Nervous System	332	394	(—) 16
Diseases of the Heart	9,305	9,147	(+) 2
Arteriosclerosis and Other Diseases of Arteries	554	559	...
Other Diseases of the Circulatory System	131	90	(+) 45
Bronchitis	236	256	(—) 8
Pneumonia	1,164	1,394	(—) 17
Other Diseases of the Respiratory System	354	306	(+) 16
Diseases of the Stomach	149	156	(—) 4
Diarrhoea and Enteritis—under 2 years	77	120	(—) 36
2 years and over	59	113	(—) 48
Appendicitis	102	161	(—) 37
Hernia, Intestinal Obstruction	238	261	(—) 9
Cirrhosis of the Liver	136	91	(+) 50
Peritonitis (without specified cause)	22	24	(—) 7
Other Diseases of the Digestive System	353	333	(+) 6
Nephritis	1,121	1,309	(—) 14
Other Diseases of the Genito-Urinary System	333	382	(—) 13
Criminal Abortion	18	25	(—) 29
Puerperal Septicaemia and Post-abortive Sepsis	12	27	(—) 55
Puerperal Thrombophlebitis, Embolism and Sudden Death (Sepsis)	11	16	(—) 33
Other Puerperal Diseases	89	105	(—) 15
Congenital Malformations	357	332	(+) 7
Congenital Debility	42	72	(—) 41
Premature Birth	677	661	(+) 2
Other Diseases peculiar to the First Year of Life	508	433	(+) 17
Senility	936	1,102	(—) 15
Suicide	322	257	(+) 25
Accident	1,494	1,340	(+) 11
Other Violence	50	42	(+) 19
All Other Causes	120	171	(—) 30
Total	28,449	29,011	...

(a) Adjusted to the mean population of 1947, viz., 2,985,073.

(b) The percentage increase or decrease is calculated from the precise average for 1942-46 and not from the adjusted whole number shown here. When the number of deaths is small a difference in the percentages on the two bases is apparent.

The total includes 16,032 males and 12,417 females, equivalent to rates of 10.74 and 8.32 respectively per 1,000 of population. The rate in the Metropolis was 10.36 per 1,000, and in the Remainder of the State 8.71.

Of the 28,449 people who died during the year, 2,513 were under 5 years of age; 10,771 were aged 5 to 64 years, and 15,165 were 65 years and over. The rates per 1,000 living in the main groups under and over 5 years were 8.75 and 9.61 as compared with 10.23 and 9.67, the average of the previous five years.

Infantile Mortality.

The number of children under 1 year of age who died was 2,069, equal to 29.81 per 1,000 live births. To this total the Metropolis contributed 856 or 26.82 per 1,000 live births, and the Remainder of the State 1,213 or 32.36 per 1,000 live births. The rate for 1947 is 10 per cent. below the average of the previous five years. Of the deaths under 1 year of age, 1,264 or 61 per cent. occurred under 1 week; 1,489 or 72 per cent. under 1 month, and 1,646 or 80 per cent. under three months.

Causes of Death.

The most important causes of deaths during the year are shown in the following statement which, for purposes of comparison, also gives the average number of deaths during the preceding five years, due allowance having been made for increase in population. The arrangement of the causes of death is based upon the 1938 revision of the International List of Causes of Death as adapted for use in New South Wales from 1st January, 1940.

Infective and Parasitic Diseases (Communicable Diseases).

The deaths from infective and parasitic diseases (which include tuberculosis) numbered 1,324 compared with an adjusted average of during the previous five years, being a decrease of per cent.

Deaths from typhoid fever, cerebrospinal meningitis, scarlet fever, whooping cough, diphtheria, dysentery and influenza all showed a marked decrease for the year 1947 as compared with the previous five years.

Tuberculosis of the Respiratory System was the cause of 816 deaths in 1947, the rate, 273 per million living, being 8 per cent. below the average of the previous five years. The deaths of males numbered 560 and of females 256. The rates per million living were 375 and 172 respectively. The mortality rate from all other tuberculous diseases was 35 per cent. below the average of the previous five years.

Cancer.

The deaths from cancer numbered 3,621, equal to a rate of 1,213 per million living, and 6 per cent. above the average rate of the preceding quinquennial period. The deaths of males numbered 1,843 and of females 1,778, the rates for each sex being 1,235 and 1,191 per million respectively. The crude death rate for this disease is misleading as it reflects the increase in the proportion of older people in the population rather than the true changes in the cancer death rate. The standardised rates (which adjust for the increasing proportion of aged people) show that within the last few years cancer mortality has commenced to decline.

Intra-Cranial Lesions of Vascular Origin.

In 1947 intracranial lesions caused 2,920 deaths equal to 978 per million living which is 2 per cent. above the average of the previous five years. This total comprised cerebral haemorrhage 2,028, cerebral embolism and thrombosis 801, softening of the brain 34, hemiplegia and other paralysis 49 and other intracranial effusions 8.

Of the total 1,298 were males and 1,622 females corresponding to rates of 870 and 1,087 per million living respectively.

Diseases of the Heart.

Diseases of the Heart were the cause of 9,305 deaths, the rate being 3,117 per million. The rate for deaths from heart disease in 1947 was 2 per cent. above the average rate of the preceding five years. Of the total deaths, 5,582 were of males and 3,723 females, the corresponding rates per million living of each sex being 3,741 and 2,494. It is difficult to arrive at the true increase in these deaths as distinct from the apparent increase disclosed by crude death rates over the last forty or fifty years. Even though the effects of the "ageing" of the population were removed by standardising the rates on a fixed age distribution of population, the true position would be obscured by the effects of the greater attention given to pathological diagnosis over the last thirty years.

Bronchitis and Pneumonia.

Bronchitis, with 236 deaths, equal to a rate of 79 per million living, showed a decrease of 8 per cent., and pneumonia with 1,164 deaths, or 390 per million, a decrease of 16 per cent. as compared with the experience of the previous five years.

Of the deaths from bronchitis, 140 were of males and 96 of females, or 94 and 64 per million living respectively. Of the persons who died from pneumonia, 649 were males and 515 were females, and the rates were 435 and 345 per million living of each sex.

Nephritis.

During 1947 there were 1,454 deaths due to diseases of the genito-urinary system, of which 1,121 were caused by nephritis (acute and chronic). The rate for nephritis was 376 per million living; for males 415 per million and for females 336 per million. In 1947 the rate was 16 per cent. below the average of the previous five years.

Mortality of Infants.

The principal causes of deaths of children under one year of age were prematurity 677; congenital malformations 309; injury at birth 268; other developmental diseases 282; pneumonia 210; infective and parasitic diseases 77 (including whooping cough 29; influenza 25); cerebro-spinal meningococcal meningitis 17; diphtheria 39; tuberculosis 22; diarrhoea and enteritis 60; encephalitis and meningitis 35; convulsions 3; and bronchitis 13.

The following statement shows the deaths of children under one year of age per 1,000 live births, classified in the principal disease groups, during 1947 in comparison with the preceding five years:—

Cause of Death.	Males.		Females.		Total.	
	1947.	1942-46.	1947.	1942-46.	1947.	1942-46.
Tuberculosis	·14	·15	·12	·11	·13	·13
Syphilis	·08	·06	·03	·04	·06	·05
Other Infective or Parasitic Diseases	1·17	1·50	·65	1·45	·92	1·48
Meningitis	·50	·55	·51	·41	·50	·48
Convulsions	·06	·20	·03	·11	·04	·15
Bronchitis	·25	·18	·12	·17	·19	·18
Pneumonia	3·30	3·94	2·74	3·11	3·03	3·54
Diarrhoea and Enteritis	·98	1·54	·74	1·27	·86	1·41
Malformations	5·31	4·81	3·54	4·22	4·45	4·52
Congenital Debility	·64	1·26	·56	1·06	·60	1·16
Premature Birth	10·79	11·70	8·65	9·65	9·76	10·71
Injury at Birth	4·50	4·51	3·18	2·87	3·86	3·71
Other Diseases peculiar to First Year of Life	4·14	3·89	2·74	2·70	3·46	3·31
Other Causes	2·32	2·66	1·55	2·27	1·95	2·47
All Causes	34·18	36·95	25·16	29·44	29·81	33·30

SECTION I.

A. COMMUNICABLE DISEASES.

NOTIFIABLE INFECTIOUS DISEASES RECORDED IN NEW SOUTH WALES DURING THE YEAR ENDED 31ST DECEMBER, 1947.

Public Health Acts, 1902-1944.

The Public Health Act, 1902-1944, provides that the Governor may, by proclamation in the *Government Gazette*, declare that any disease therein named is an infectious disease.

	Notifiable from—	Cases and Deaths Notified.					
		1945.		1946.		1947.	
		Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Typhoid fever and paratyphoid.....	1st January, 1898	29	2	25	3	28	...
Scarlet fever	„	6,977	6	3,090	4	1,540	2
Diphtheria or membranous croup	„	1,478	84	1,279	57	761	49
Bubonic plague.....	23rd January, 1900.....	...	...	...	...	...	...
Infantile paralysis (including any form of acute anterior poliomyelitis, polioencephalitis or polio-myeloencephalitis).	1st February, 1912. Definition Re-proclaimed 14th August, 1931.	668	47	656	52	82*	8
Epidemic cerebro-spinal fever (meningococcal meningitis)	11th October, 1915 ...	117	29	89	29	65	23
Encephalitis Lethargica	1st April, 1926	3	4	3	1	2	2
Cholera	12th August, 1927	...	...	...	...	...	...
Typhus fever.....	„	26	3	43	2	24	...
Yellow fever	„	...	...	...	...	...	...
Tuberculosis (all forms)	14th May, 1945	1,688	803	1,671	818	1,751	816
Puerperal infection	16th August, 1929	151	13*	185	10*	85	12*
Undulant fever	13th August, 1937	2	...	...	...	1	...
Leprosy	25th February, 1938 ...	3	1	3	2	...	...
Total		11,142	992	7,044	978	4,340	912
Population at 31st Dec.		2,917,415		2,945,220		2,985,073	

* Compiled as from receipt of notification.

Public Health Act, 1902-1944.

A total of 4,340 cases of infectious disease was notified under the Public Health Act, 1902-1944, during 1947 or 2,784* less cases than in 1946. The number of cases notified from the 147 municipalities, 134 shires and the unincorporated portion of the Western Division; the deaths due to these infections; the age and sex of the patients; and the seasonal incidence of the various diseases are shown in appended Table I-IV (pp. 11-16). As indicated below, venereal diseases are notifiable under the Venereal Diseases Act, 1918.

Typhoid Fever.—In 1947 there were 28 cases notified and no deaths. The incidence of this disease was slightly lower than in 1946, when there were 25 cases and 3 deaths.

Scarlet Fever.—There were 1,540 notified cases and 2 deaths, a decrease of 1,550 cases as compared with 1946 when 3,090 cases and 4 deaths were recorded.

Diphtheria.—There were 761 notified cases and 49 deaths, in comparison with 1,279 cases and 57 deaths in 1946.

Infantile Paralysis.—83 cases and 8 deaths were notified. In 1946 there were 656 cases with 52 deaths.

Puerperal Infection.—85 cases were notified or 100 less than in 1946. The recorded deaths from puerperal septicaemia and post-abortive sepsis in 1947 numbered 12, which does not include 13 deaths from sepsis classed as criminal abortion. Under the revised International List of Causes of Death which came into use in 1940, puerperal thrombophlebitis, embolism and sudden death are included as subdivisions of the

“infection” group but to maintain comparability with previous years such deaths are omitted here and in the following pages. There were 11 deaths in this additional group.

Cerebro-Spinal Meningitis.—65 cases and 23 deaths were reported in 1947. In 1946 there were 89 cases and 29 deaths.

Encephalitis Lethargica.—2 cases and 2 deaths were notified, compared with 3 cases and 1 death in 1946.

Undulant Fever.—1 case, but no deaths, were recorded in 1947.

Bubonic Plague.—No case of this disease has been reported since June, 1923. Rat-catchers are continuously employed in the vicinity of wharves and in the city area. Plague was not detected in the 1,625 rats examined in the Microbiological Laboratory.

Smallpox.—No case was reported during 1947.

Leprosy.—No cases or deaths of leprosy were notified in 1947. For the Report on Leprosy in New South Wales see p. 78.

Public Health (Amendment) Act, 1915.

Pulmonary Tuberculosis.—In 1947 registered new cases amounted to 1,751 an increase of 80 on the registrations received in 1946. There were 816 deaths, a decrease of 2 compared with the deaths recorded in 1946. A survey by the Director of the Tuberculosis Division is on page 54.

Venereal Diseases Act, 1918.

Cases of venereal disease notified in 1947 numbered 5,011 a decrease of 390 cases on the number 5,401 received in 1946. The Report of the Director of the Division is on p. 28.

GRAPH No. I

ANNUAL DEATH RATE
Per 1,000 of the Population in N.S.W.
1875-1947

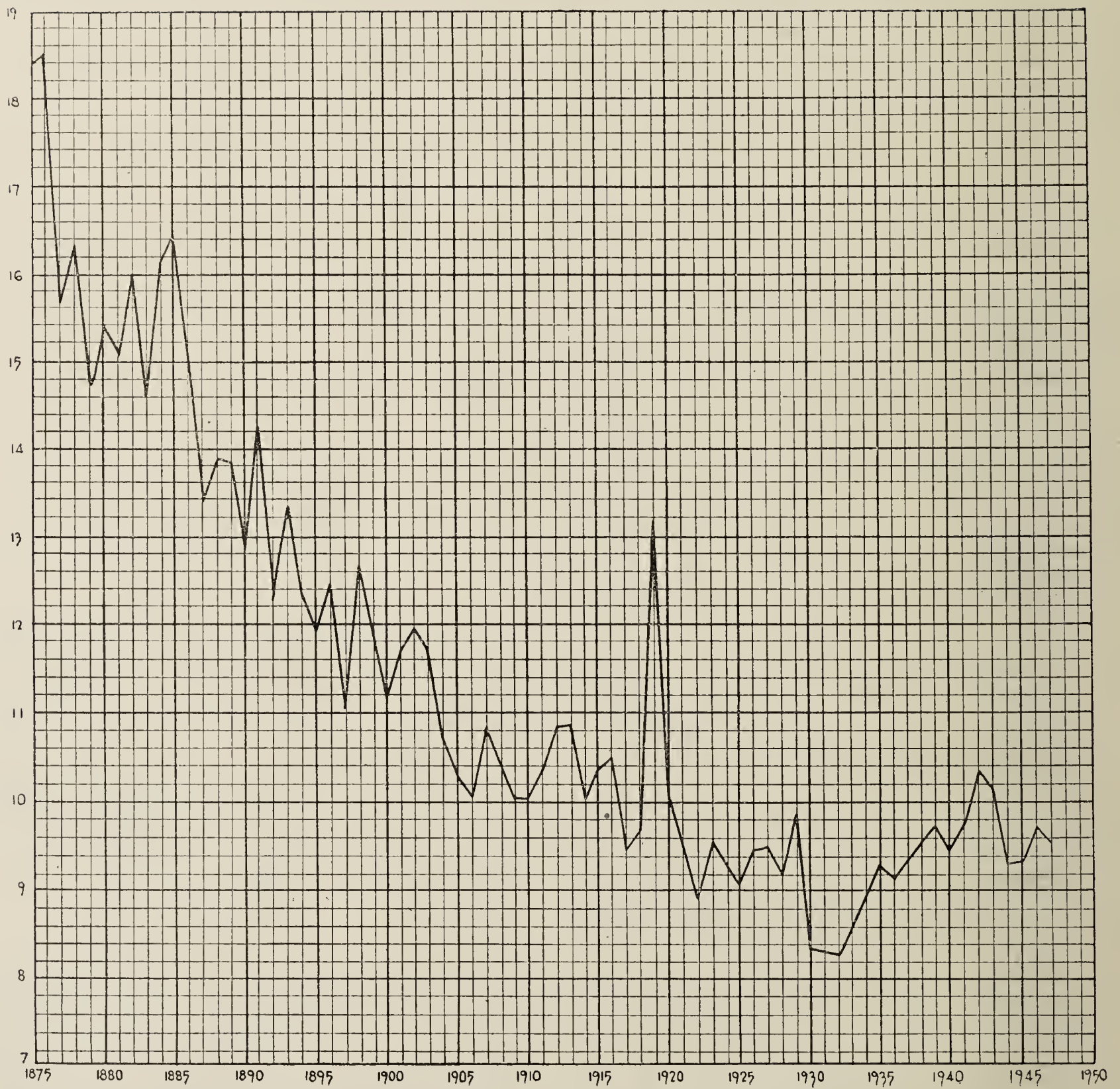


TABLE I.—Showing the number of notified cases of, and deaths from, the following diseases :—Cerebro-spinal Fever (Meningococcal Meningitis), Diphtheria and Membranous Croup, Encephalitis Lethargica, Infantile Paralysis (Acute Anterior Poliomyelitis), Scarlet Fever, Typhoid Fever (including Paratyphoid), and Puerperal Infection in the METROPOLITAN COMBINED DISTRICTS for the year ended 31st December, 1947.

Municipality or Shire.	Estimated Mean Population.	Typhoid and Paratyphoid.		Scarlet Fever.		Diphtheria.		Infantile Paralysis.		Cerebro-spinal Meningitis.		Encephalitis Lethargica.		Puerperal Infection.	
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
METROPOLITAN MUNICIPALITIES.															
Sydney, City of	95,580	...	...	34	...	19	3	1	...	2	...	...	...	10	...
Alexandria.....	8,090	...	...	6	...	10	1	...	...	...	...	...	...	...	...
Annandale	12,370	...	...	3	...	2	...	...	...	...	...	...	...	...	...
Ashfield	44,440	...	...	19	...	3	...	2	...	1	1	...	1	2	...
Auburn	22,040	...	...	28	...	7	...	1	...	...	...	...	...	1	...
Balmain	28,340	1	...	19	...	3	...	...	...	...	1	...	...	2	...
Bankstown	43,620	...	...	52	...	14	1	8	1	...	...	...	...	3	...
Bexley	26,960	...	...	20	...	5	...	...	...	...	...	...	...	1	...
Botany	9,540	...	...	14	...	4	...	1	...	...	...	...	...	...	...
Burwood	21,570	...	...	6	...	8	2	1	...	...	1	...	...	1	...
Canterbury	99,840	...	...	68	...	15	2	5	2	1	...	...	...	4	...
Concord	29,430	...	...	23	...	2	...	...	...	1	1	...	...	...	...
Darlington	3,040	...	...	1	...	4	...	...	...	...	...	...	...	...	...
Drummoyne	32,960	1	...	16	...	6	1	1	...	...	...	...	...	...	...
Dundas	7,660	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Eastwood	4,130	...	...	...	...	1	...	1	...	...	...	...	...	1	...
Enfield	17,270	...	...	11	...	2	...	...	...	...	...	...	...	...	...
Ermington and Rydalmere.....	3,390	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Erskineville	6,870	...	...	6	...	1	...	...	...	...	...	...	...	...	...
Glebe	20,470	1	...	11	...	16	...	2	1	1	...	...	...	...	...
Granville	27,060	...	...	24	...	12	2	...	...	2	...	...	...	2	...
Homebush	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...
Hunter's Hill	11,470	...	...	6	...	...	...	...	...	...	...	...	...	...	...
Hurstville	34,040	...	...	45	...	3	...	...	...	...	...	...	...	1	...
Kogarah.....	39,390	...	...	30	...	1	...	1	...	...	...	...	...	2	...
Kuring-gai	39,810	...	...	35	...	...	...	1	1	...	...	...	...	...	...
Lane Cove	19,890	1	...	10	...	1	...	...	...	...	...	...	...	...	...
Leichhardt.....	29,410	...	...	26	...	2	...	1	...	3	...	...	...	...	...
Lidcombe	30,310	...	...	12	...	3	...	1	...	2	1	...	1	1	...
Manly	33,420	...	...	15	...	2	1	1	...	2	...	...	1	2	1
Marrickville	46,460	...	...	28	...	9	...	3	...	...	...	...	...	1	...
Mascot	18,000	1	...	8	...	10	...	...	...	...	...	...	...	2	...
Mosman	27,380	...	...	14	...	...	...	1	...	...	...	...	...	1	...
Newtown	24,950	...	...	19	...	8	1	1	...	...	...	...	...	1	...
North Sydney	60,170	1	...	20	...	5	...	1	...	1	1	...	...	3	...
Paddington	24,680	...	...	9	...	3	1	...	...	...	...	...	...	4	...
Parramatta	20,930	...	...	9	...	1	...	...	...	1	...	...	...	...	...
Petersham	29,190	...	...	11	...	3	...	3	...	...	...	...	...	2	...
Randwick	100,820	1	...	84	...	15	1	2	...	4	2	...	...	1	...
Redfern	18,630	...	...	13	...	9	...	1	...	4	...	...	...	2	...
Rockdale	47,530	...	...	18	...	6	...	2	...	...	2	...	...	1	...
Ryde	36,690	...	...	10	...	...	...	2	...	...	...	...	2	1	...
St. Peters	12,310	...	...	2	...	8	1	2	...	...	1	...	...	...	...
Strathfield	19,280	...	...	5	...	...	...	...	1	...	...	...	...	1	...
Vauchuse	9,080	...	...	6	...	1	...	...	...	1	...	...	...	...	...
Waterloo	11,250	1	...	1	...	6	...	...	...	2	...	...	...	...	...
Waverley	74,520	...	...	42	...	9	1	4	...	2	1	...	...	7	...
Willoughby	51,970	...	...	36	...	3	...	...	1	1	...	...	...	...	...
Woollahra	44,810	...	...	26	...	6	...	1	...	...	...	...	...	...	...
EXTRA METROPOLITAN MUNICIPALITIES.															
Cabramatta and Canley Vale	10,880	...	...	5	...	6	2	1	...	...	...	...	...	...	1
Fairfield	15,990	...	...	10	...	3	1	...	...	...	...	...	...	...	...
Holroyd	24,250	...	...	20	...	2	...	1	...	2	1	...	...	...	...
Ingleburn	3,240	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Liverpool	12,440	...	...	4	...	6	...	1	1	...	...	...	...	...	...
EXTRA METROPOLITAN SHIRES AND PORT JACKSON.															
Hornsby.....	31,500	...	...	17	...	1	...	2	1	1	...	...	...	1	...
Warringah	32,890	...	...	14	...	2	...	1	...	...	...	...	...	1	...
Harbour of Port Jackson	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	1,602,250	8	...	973	...	268	21	57	9	34	13	...	5	64	2

GRAPH No. 2

Cancer Tuberculosis, and Heart Disease—Annual Death Rate per 100,000 of Population
in New South Wales, 1875-1947

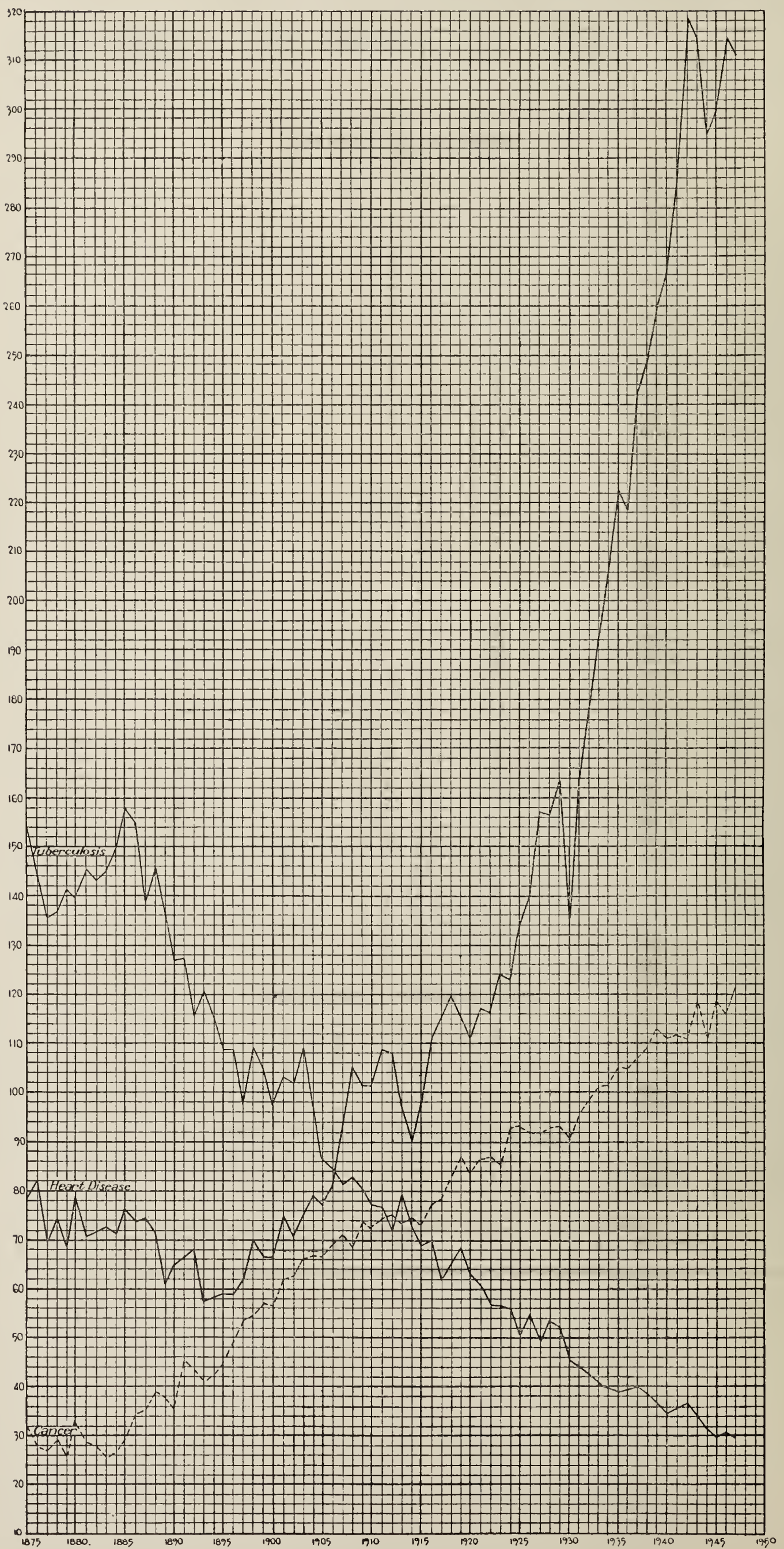


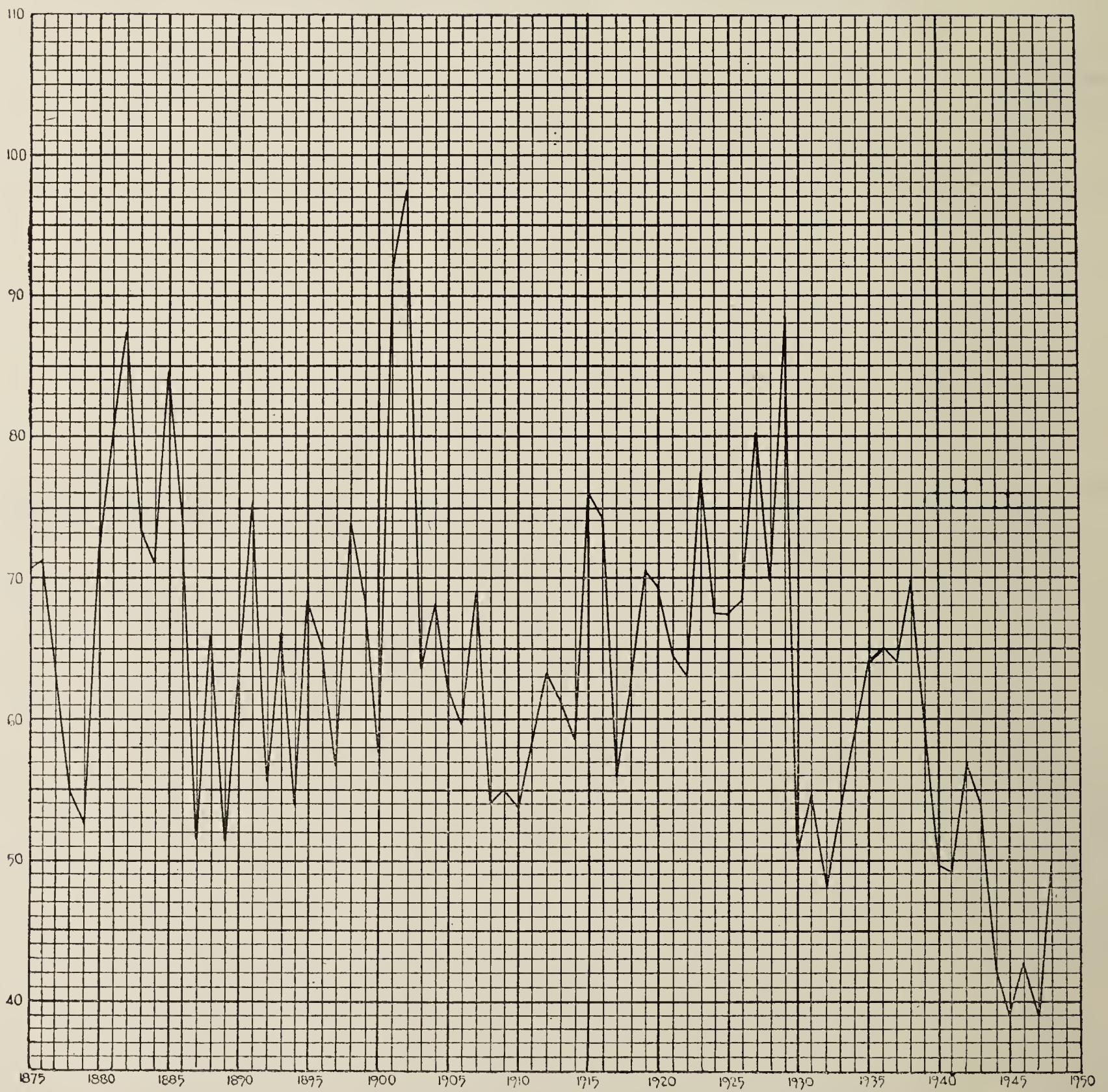
TABLE II.—Showing the number of notified cases of, and deaths from, Cerebro-spinal Fever (Meningococcal Meningitis), Diphtheria or Membranous Croup, Encephalitis Lethargica, Infantile Paralysis (Acute Anterior Poliomyelitis), Scarlet Fever, Typhoid Fever (including Paratyphoid), and Puerperal Infection in the HUNTER RIVER COMBINED DISTRICT for the year ended 31st December, 1947.

Municipality or Shire.	Estimated Mean Population.	Typhoid and Paratyphoid.		Scarlet Fever.		Diphtheria.		Infantile Paralysis.		Cerebro-spinal Meningitis.		Encephalitis Lethargica.		Puerperal Infection.	
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
MUNICIPALITIES.															
Greater Newcastle	126,360	3	...	59	...	50	2	2	...	1	...	...	3	2	...
Cessnock	13,110	...	...	3	...	3	...	...	...	...	...	...	1	...	...
Maitland	18,960	...	...	13	...	14	1	...	...	3	...	...	...	1	...
Singleton	3,940	...	...	7	...	...	...	...	...	...	...	...	...	...	...
SHIRES.															
Kearsley	26,030	...	...	8	...	9	1	...	...	1	...	...	...	...	...
Lake Macquarie	41,880	...	...	23	...	14	...	...	...	1	...	...	...	...	...
Lower Hunter	6,560	...	...	2	...	2	...	...	...	...	...	...	...	...	...
Port Stephens	5,890	...	...	1	...	4	...	...	...	1	...	...	...	...	...
Port Hunter	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	242,730	3	...	116	...	96	4	2	...	7	...	...	4	3	...

TABLE III.—Showing the number of notified cases of, and deaths from, Cerebro-Spinal Fever (Meningococcal Meningitis) Diphtheria or Membranous Croup, Encephalitis Lethargica, Infantile Paralysis (Acute Anterior Poliomyelitis) Scarlet Fever, Typhoid (including Paratyphoid) and Puerperal Infection in the SOUTH COAST HEALTH DISTRICT, for the year ended 31st December, 1947.

Municipality or Shire.	Estimated Mean Population.	Typhoid and Paratyphoid.		Scarlet Fever.		Diphtheria.		Infantile Paralysis.		Cerebro-spinal Meningitis.		Encephalitis Lethargica.		Puerperal Infection.	
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
MUNICIPALITIES.															
Berry	2,780	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bowral	3,640	...	...	4	...	...	...	...	...	...	...	...	...	...	...
Broughton Vale	190	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Camden	2,930	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Campbelltown	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gerrington	880	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Jamberoo	930	...	...	...	...	1	1	...	...	...	...	...	...	...	...
Kiama	2,270	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nowra	3,570	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Shellharbour	3,100	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Shoalhaven South	790	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ulladulla	1,830	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Wollongong	62,580	...	...	20	...	6	...	...	...	...	...	...	...	1	...
SHIRES.															
Cambewarra	1,290	...	...	1	...	1	...	...	...	...	...	...	...	...	...
Clyde	2,240	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nattai	5,470	...	...	6	...	...	...	...	...	...	...	...	...	...	...
Nepean	4,410	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Wingecarribee	7,240	...	...	10	...	3	...	...	...	...	...	...	...	...	...
Wollondilly	7,820	...	...	3	1	1	...	...	...	...	...	...	...	...	1
Total	113,960	...	...	45	1	13	1	...	...	...	...	...	...	1	1

GRAPH No. 3.
Pneumonia—Annual Death Rate per 100,000 of Population in N.S.W., 1875–1947



GRAPH No. 4.
Influenza—Annual Death Rate per 100,000 of Population in N.S.W., 1875–1947

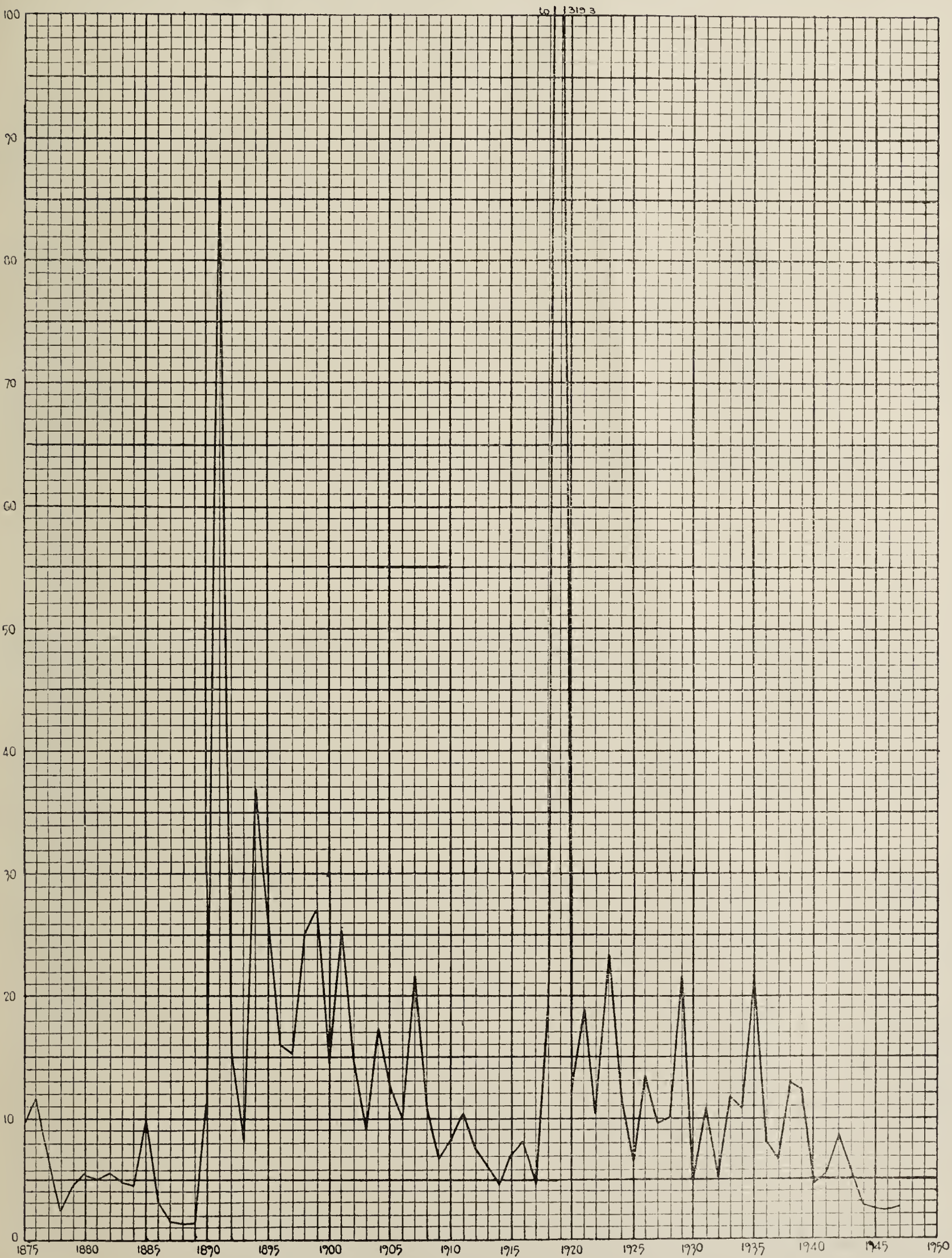


TABLE IV.—Showing the number of notified cases of, and deaths from, Cerebro-Spinal Fever (Meningococcal Meningitis), Diphtheria or Membranous Croup, Encephalitis Lethargica, Infantile Paralysis (Acute Anterior Poliomyelitis), Scarlet Fever, Typhoid (including Paratyphoid) and Puerperal Infection in the RICHMOND-TWEED HEALTH DISTRICT for the year ended 31st December, 1947.

Municipality or Shire.	Estimated Mean Population.	Typhoid and Paratyphoid.		Scarlet Fever.		Diphtheria.		Infantile Paralysis.		Cerebro-spinal Meningitis.		Encephalitis Lethargica.		Puerperal Infection.	
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
MUNICIPALITIES.															
Ballina	3,200	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Casino	6,660	1	...	...	...	...	1	...	...	...	...	...	...	...	...
Grafton	8,220	...	...	1	...	...	3	...	...	...	...	...	...	...	...
Grafton South	3,690	...	...	...	...	...	...	...	...	...	...	...	...	...	...
*Lismore	15,100	...	...	...	...	1	1	...	...	...	1	...	...	...	...
Maclean	1,670	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mullumbimby	1,600	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ulmarra	1,660	...	...	...	...	...	...	...	...	...	...	...	...	...	...
SHIRES.															
Byron	8,760	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Copmanhurst	2,640	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gundurimba	3,930	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Harwood	4,660	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kyogle	11,450	...	...	...	...	...	2	...	...	...	...	...	...	...	...
Terania	6,980	...	...	...	...	...	1	...	...	...	...	...	...	...	...
Tintenbar	4,780	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tomki	3,670	...	...	...	...	...	...	...	...	...	...	...	...	...	...
*Tweed	19,290	...	...	...	...	...	4	...	...	...	1	...	...	...	...
Woodburn	4,330	...	...	...	...	...	1	...	...	...	...	...	...	...	...
Total	112,290	1	...	1	...	1	13	...	...	...	2	...	...	...	...

* The Richmond-Tweed Health District with Headquarters at Lismore, was formally opened on 1st December, 1947.

TABLE V.—Showing the number of notified cases of, and deaths from, Cererbo-Spinal Fever (Meningococcal Meningitis), Diphtheria or Membranous Croup, Encephalitis Lethargica, Infantile Paralysis (Acute Anterior Poliomyelitis), Scarlet Fever, Typhoid (including Paratyphoid) and Puerperal Infection in the MITCHELL HEALTH DISTRICT for the year ended 31st December, 1947.

Municipality or Shire.	Estimated Mean Population.	Typhoid and Paratyphoid.		Scarlet Fever.		Diphtheria.		Infantile Paralysis.		Cerebro-spinal Meningitis.		Enecephalitis Lethargica.		Puerperal Infection.	
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
MUNICIPALITIES.															
†Bathurst	11,820	...	...	...	...	...	1	...	...	1	1	...	...	...	...
*Blue Mountains	21,020	...	...	2	...	...	...	...	...	...	...	...	...	...	...
Lithgow	14,440	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Molong	1,660	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mudgee	4,180	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Orange	13,610	...	...	...	...	1	...	...	...	...	...	...	...	...	...
SHIRES.															
Abercrombie	3,920	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Amaroo	2,280	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Blaxland	9,290	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Canobolas	7,630	...	...	...	...	...	...	...	...	...	1	...	...	...	...
Cudgegong	4,310	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gulgong	3,360	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Lyndhurst	6,140	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Oberon	3,210	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Rylstone	4,400	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Turon	3,500	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	114,770	...	...	3	...	1	1	...	...	1	2	...	...	...	...

* Blackheath and Katoomba were incorporated in City of Blue Mountains from 1st October, 1947.

† The Mitchell Health District with Headquarters at Bathurst was formally opened on 1st December, 1947.

TABLE VI.—Showing the number of notified cases of, and deaths from, Cerebro-Spinal Fever (Meningococcal Meningitis) Diphtheria or Membranous Croup, Encephalitis Lethargica, Infantile Paralysis (Acute Anterior Poliomyelitis), Scarlet Fever, Typhoid (including Paratyphoid), and Puerperal Infection in the REMAINDER OF STATE for the year ended 31st December, 1947.

Municipality.	Estimated Mean Population.	Typhoid and Paratyphoid.		Scarlet Fever.		Diphtheria.		Infantile Paralysis.		Cerebro-spinal Meningitis.		Encephalitis Lethargica.		Puerperal Infection.	
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
MUNICIPALITIES.															
Albury	14,270	...	...	6	...	2	1	...	...	...	1	...	...	1	...
Armidale	7,780	...	...	3	...	5	...	...	...	...	...	...	...	...	...
Ballina	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Balranald	1,250	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Barraba	1,460	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bathurst	...	3	...	1	...	1	...	3	...	...	...	...	...	...	...
Bega	2,840	...	...	...	...	1	...	1	...	...	...	...	...	...	...
Blue Mountains (City)	...	...	...	6	...	2	...	...	...	...	...	...	...	...	...
Bombala	1,110	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bourke	2,020	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Brewarrina	840	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Broken Hill	27,170	2	...	44	...	6	...	...	...	...	...	...	...	3	...
Campbelltown	3,730	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Casino	...	...	...	...	...	11	...	...	...	...	...	...	...	...	...
Castlereagh	1,310	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cobar	2,000	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Condobolin	2,610	...	...	...	...	5	...	...	...	...	...	...	...	...	...
Cooma	2,240	...	...	1	...	...	...	1	...	...	...	1	...	...	...
Coonamble.....	2,580	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Cootamundra	5,240	3	...	5	...	2	...	...	...	...	...	...	...	...	...
Corowa	2,760	...	...	2	...	...	...	...	...	1	...	...	...	...	...
Cowra	5,460	...	...	6	...	...	...	...	...	...	...	...	...	...	...
Deniliquin	3,660	...	...	2	...	1	...	...	...	...	...	...	...	...	...
Dubbo	9,520	...	...	...	...	1	...	1	...	...	...	...	...	...	...
Dungog	2,060	...	...	1	...	1	...	...	...	...	...	...	...	...	...
Forbes	5,950	...	...	7	...	...	...	...	...	...	...	...	...	...	...
Glen Innes	5,460	...	...	3	...	7	...	...	...	...	...	...	...	...	...
Goulburn	15,980	...	...	5	...	16	...	...	...	...	...	...	...	...	...
Grafton	...	...	...	4	...	22	...	...	...	...	...	...	...	...	...
Grafton South	...	1	...	1	...	9	...	...	...	...	...	...	...	...	...
Grenfell	2,430	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Gunnedah	4,290	...	...	1	...	4	...	...	...	...	...	...	...	...	...
Hay	2,980	...	...	...	...	1	...	2	...	...	...	...	...	...	...
Inverell	6,480	...	...	2	...	2	...	...	...	...	...	...	...	...	...
Junee	4,020	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Kempsey	6,280	...	...	...	...	3	...	...	...	...	...	...	1	...	...
Lismore	...	...	...	8	...	23	...	...	...	1	...	...	...	1	...
Lithgow	...	...	...	6	...	3	...	...	...	...	...	...	...	...	...
Macleay	...	...	...	1	...	2	...	...	...	...	...	...	...	...	...
Manilla	1,810	...	...	...	...	12	1	...	...	...	...	...	...	...	...
Moama	670	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Moree	5,080	...	...	1	...	5	...	...	...	...	...	...	...	...	...
Mudgee	...	...	...	5	...	...	...	...	...	...	...	...	...	1	...
Murrumburrah	2,610	...	...	...	...	1	...	...	...	...	...	...	...	1	...
Murrurundi	1,050	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Muswellbrook	3,920	...	...	6	...	...	...	...	...	...	...	...	...	...	...
Narrabri.....	3,310	...	...	6	...	8	...	...	...	...	...	...	...	...	...
Narrandera	4,200	...	...	...	...	3	...	...	...	1	1	...	...	1	...
Narromine	1,810	...	...	3	...	...	...	...	...	...	...	...	...	...	...
Nyngan	1,800	...	...	1	...	...	...	...	...	1	...	...	1	...	...
Orange	...	...	...	6	...	2	...	...	...	...	...	...	...	1	...
Parkes	6,870	...	...	4	...	2	...	...	...	3	...	...	...	...	...
Peak Hill	1,150	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Penrith	4,950	...	...	...	...	1	...	1	...	...	...	...	...	...	...
Port Macquarie.....	2,870	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Queanbeyan	4,990	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Quirindi	2,630	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Richmond	3,390	...	...	...	...	...	...	2	...	1	...	...	...	...	...
Scone	2,270	...	...	6	...	1	...	...	...	...	...	...	...	...	...
St. Mary's	5,340	...	...	3	...	...	...	...	...	...	...	...	...	...	...
Tamworth	12,020	...	...	3	...	7	...	...	1	...	...	...	...	...	...
Taree	5,740	...	...	1	...	1	...	...	...	...	...	...	...	...	...
Temora	4,170	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tenterfield	3,030	...	...	6	...	...	...	...	...	...	...	...	...	...	...
Ulmarra	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Uralla	1,180	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Wagga Wagga	15,240	...	...	12	...	2	...	...	...	2	...	...	...	...	...
Walcha	1,150	...	...	...	...	...	...	...	...	1	...	...	...	...	...
Warren	1,750	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Wellington.....	4,710	...	...	2	...	3	...	...	...	1	...	...	...	...	...
Wentworth	2,460	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Wilcannia	790	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Windsor	3,880	...	...	...	...	...	...	...	...	1	...	...	...	...	...
Wingham	2,090	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Yass	3,250	...	...	2	...	2	...	...	...	...	...	...	...	...	...
Young	4,630	...	...	2	...	3	...	...	...	...	...	...	...	...	...
Total Municipalities	282,990	12	...	187	...	190	2	11	1	13	2	1	2	9	...

REMAINDER OF STATE.—Return showing the number of cases, etc., from Country Shires.

[illegible]

REMAINDER OF STATE.—Return showing the number of cases, etc., from Country Shires—*continued*.

Shire.	Estimated Mean Population.	Typhoid and Paratyphoid.		Scarlet Fever.		Diphtheria.		Infantile Paralysis.		Cerebro-spinal Meningitis.		Encephalitis Lethargica.		Puerperal Infection.	
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
SHIRES—continued.															
Namoi	8,000	...	...	9	...	9	...	...	...	...	...	...	...	...	...
Narraburra	3,200	...	...	3	...	...	...	...	...	...	...	...	...	...	...
Nundle	1,400	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Nymboida	2,310	...	...	...	...	2	...	...	...	...	...	...	...	...	...
Oberon	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...
Orara	1,550	...	...	1	...	1	...	...	...	...	...	...	...	...	...
Patrick Plains	5,410	...	...	2	...	...	...	...	...	...	...	...	...	...	...
Peel	6,070	...	...	2	...	...	...	...	...	...	...	...	...	...	...
Rylstone	...	...	...	1	...	2	...	...	...	...	...	...	...	...	...
Severn	4,960	...	...	3	...	2	...	...	...	1	...	...	...	...	...
Snowy River	3,310	...	...	1	...	...	...	1	...	...	...	...	...	...	...
Stroud	6,550	...	...	2	...	2	...	...	...	...	...	...	...	...	...
Sutherland.....	29,060	...	...	26	...	1	...	...	...	...	...	...	...	3	...
Talbragar	3,290	1	...	...	...	...	...	...	...	...	...	...	...	1	...
Tallaganda	2,880	...	...	2	...	...	...	...	...	...	...	...	...	...	...
Tamarang	2,430	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tenterfield	4,520	...	...	1	...	1	...	...	...	...	...	...	...	...	...
Terania	...	...	...	2	...	17	...	...	...	...	...	...	...	...	...
Timbrebongie	3,280	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tumbarumba	3,210	...	...	2	...	5	...	...	...	...	...	...	...	...	...
Tumut	8,400	...	...	1	...	6	...	...	...	...	...	...	...	...	...
Turon	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Tweed	...	...	...	16	...	25	...	...	...	1	...	...	...	...	...
Upper Hunter	4,900	...	...	6	...	1	...	...	...	...	...	...	...	...	...
Urana	2,440	...	...	1	...	1	...	...	...	1	...	...	...	...	...
Wade	10,950	1	...	3	...	1	...	1	...	...	...	...	...	...	...
Wakool	3,420	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Walgett	3,410	...	...	...	...	6	1	...	...	...	...	...	...	...	...
Wallarobba	4,270	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Waradgery	610	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Warrah	1,820	...	...	...	...	...	...	...	...	...	...	...	...	1	...
Warren	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Waugoola	4,510	...	...	2	...	...	...	...	...	...	1	...	...	...	...
Weddin	3,050	...	...	4	...	...	...	1	...	...	...	...	...	...	...
Windouran	480	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Wingadee	2,990	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Woodburn	...	...	...	3	...	1	...	...	...	...	...	...	...	...	...
Wyong	10,000	...	...	1	...	1	...	2	...	...	...	...	...	...	...
Yallaroi	3,700	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Yanko	3,390	...	...	1	...	2	...	...	...	...	...	...	...	1	...
Yarrowlumla	3,060	...	...	2	...	...	...	...	...	1	1	...	...	...	...
Total, Shires	493,900	4	...	215	1	192	7	12	...	11	4	1	3	8	...

WESTERN DIVISION (UNINCORPORATED) POLICE DISTRICTS.*

Balaranald	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bourke	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Brewarrina	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Broken Hill	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cobar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hay	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hillston	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ivanhoo	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Menindie	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mitchell	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nyngan	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Walgett	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Wentworth	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Wilcannia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total, Unincorporated	14,790	...	...	...	...	...	...	...	...	...	...	...	...	...	...

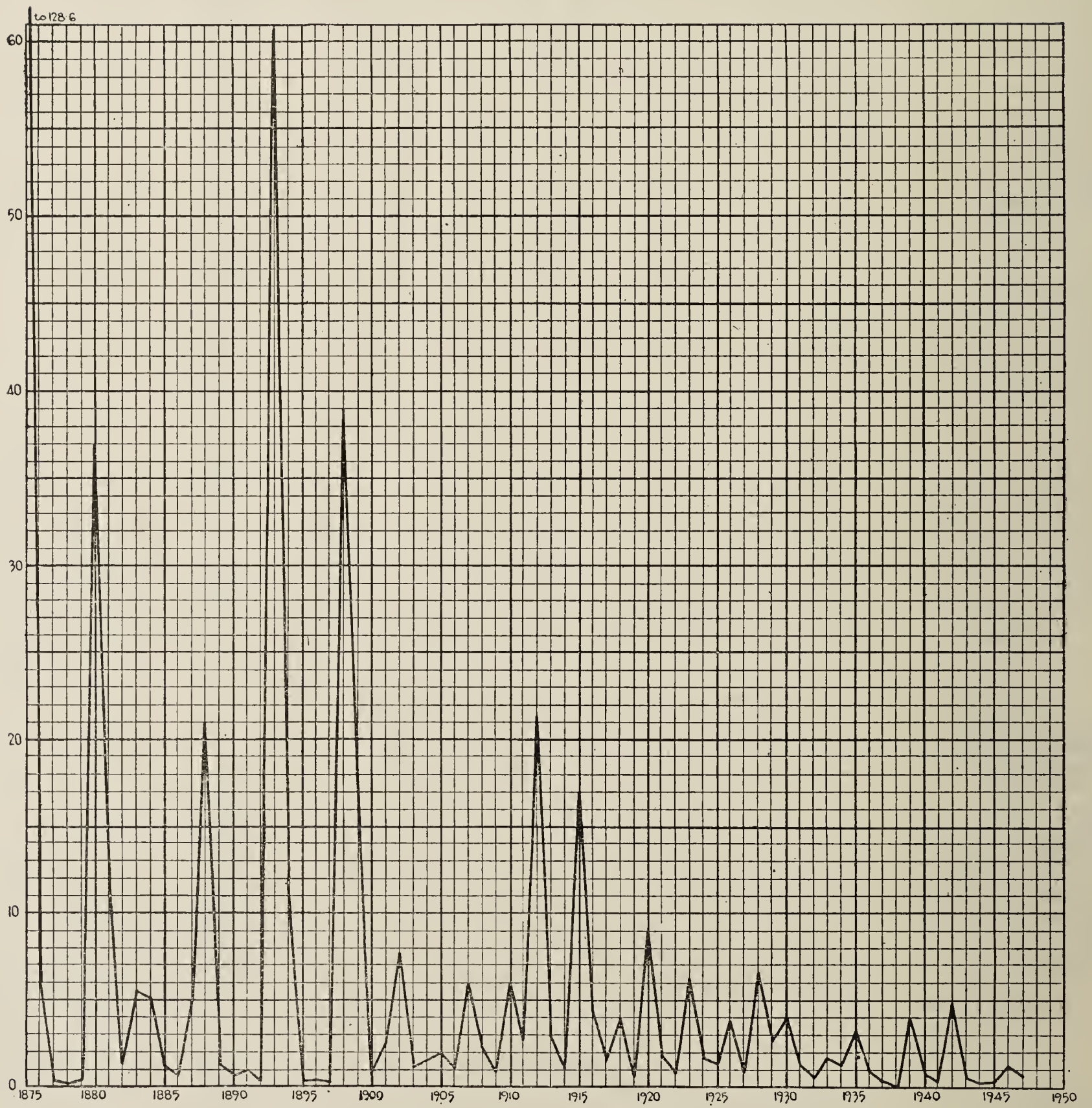
MISCELLANEOUS.

Lord Howe Island	189	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Migratory	7,204	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Outside the State—															
Australian Capital Territory	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Queensland	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Victoria	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
South Australia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total, Miscellaneous...	7,393	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total, N.S.W.	2,985,073	28	...	1,540	2	761	49	82	10	65	23	2	14	85	3

* Population and Deaths available only for unincorporated area as a whole.

GRAPH No. 5.

Measles—Annual Death Rate per 100,000 of Population in N.S.W., 1875–1947



GRAPH No. 6.

Whooping Cough—Annual Death Rate per 100,000 of the Population in N.S.W., 1875–1947

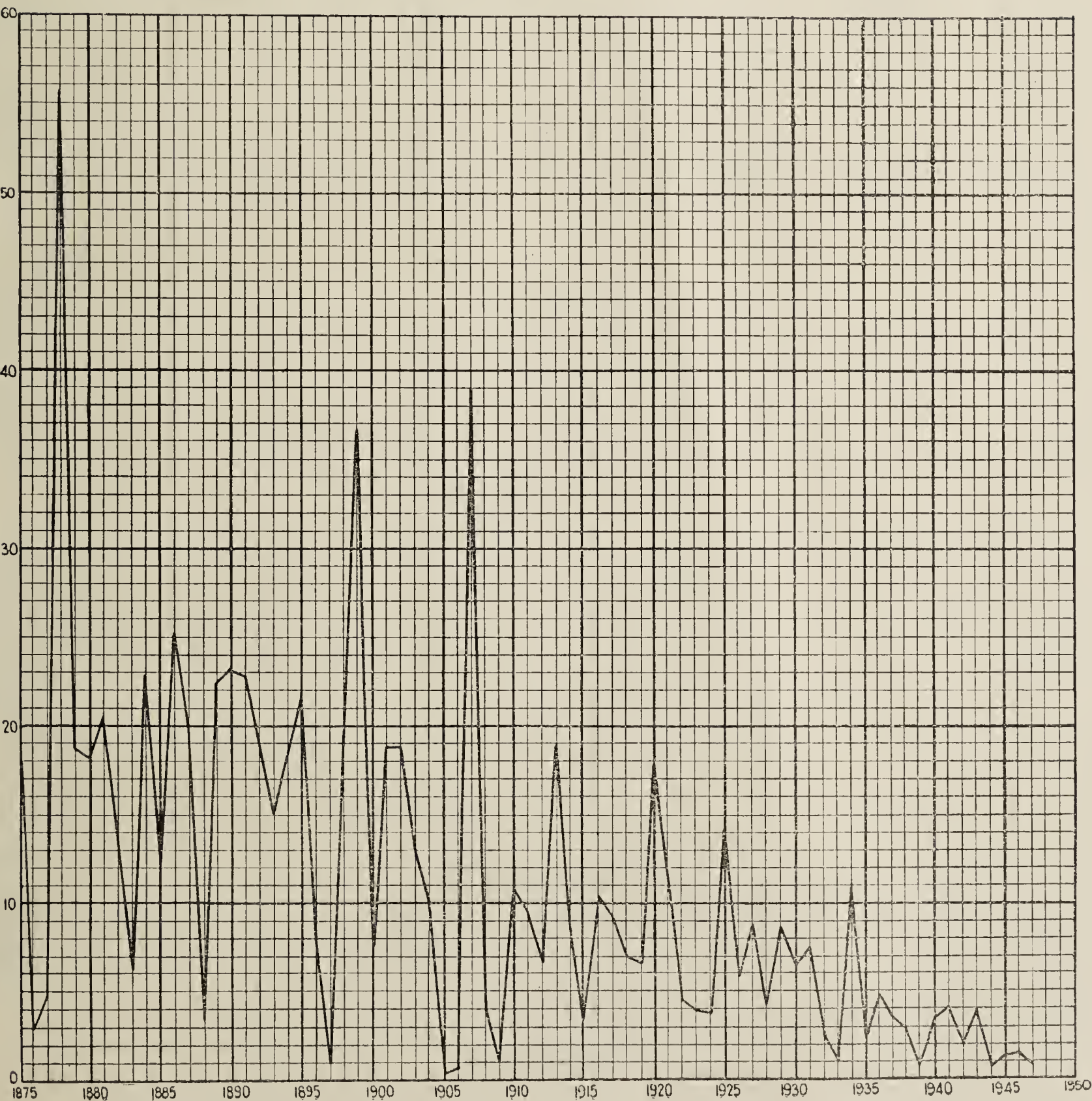
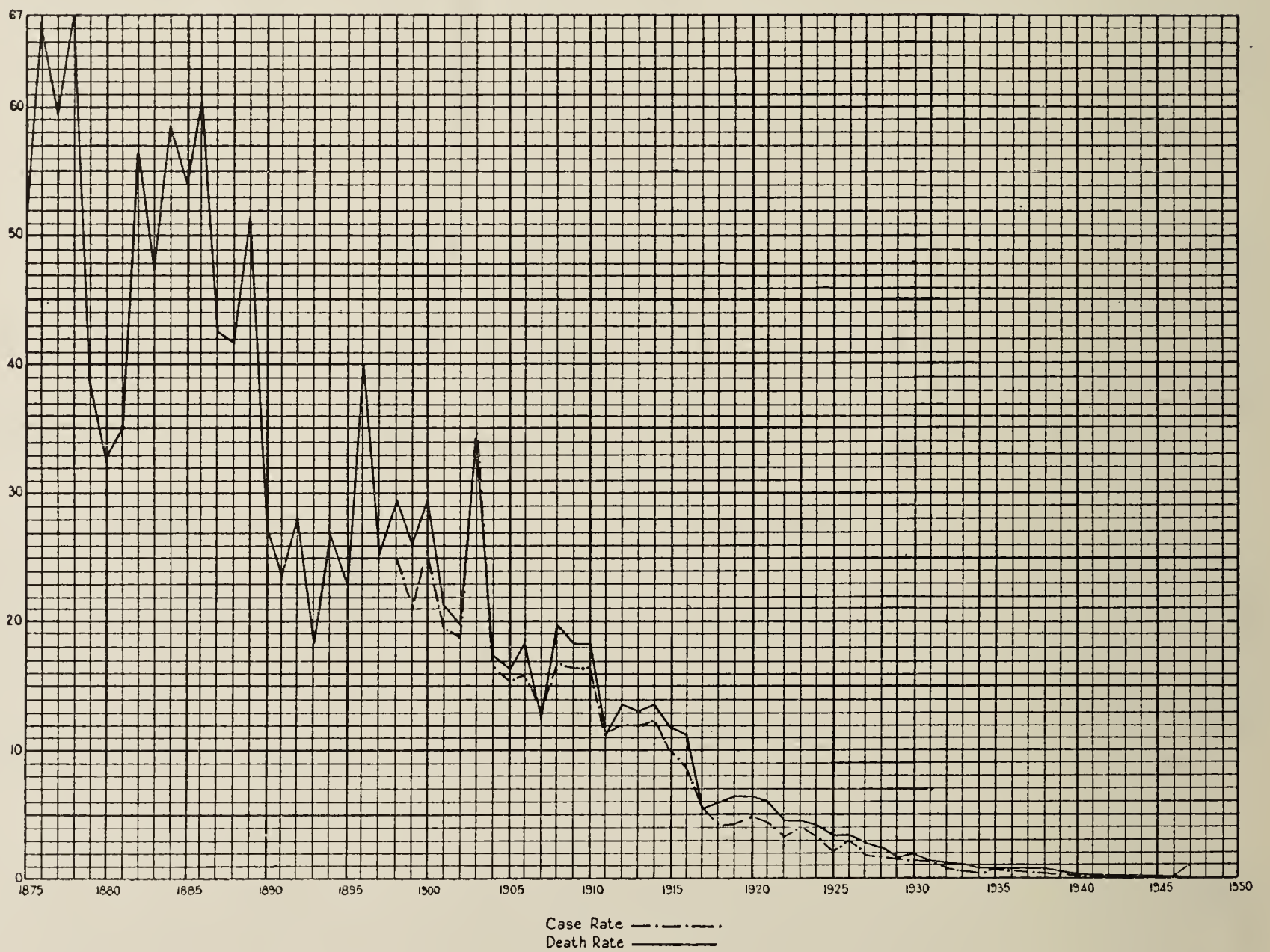


TABLE VII.—Table showing Age and Sex Incidence, and Mortality, in the Metropolitan Combined District, Hunter River Combined District, South Coast District, Mitchell District, Richmond-Tweed District, Broken Hill District, and Remainder of State, from the notified cases of Cerebro-Spinal Fever (Meningococcal Meningitis), Diphtheria and Membranous Croup, Infantile Paralysis (Acute Anterior Poliomyelitis), Encephalitis Lethargica, Scarlet Fever, Typhoid Fever (including Paratyphoid) and Puerperal Infection, for the year ended 31st December, 1947.

Age Period.	Typhoid and Para-typhoid.			Scarlet Fever.			Diphtheria.			Infantile Paralysis.			Encephalitis Lethargica.			Cerebro-spinal Meningitis.			Puerperal Infection.									
	Incidence.			Incidence.			Incidence.			Incidence.			Incidence.			Incidence.			In- cidence.									
	Notified Cases.			Notified Deaths.			Notified Cases.			Notified Deaths.			Notified Cases.			Notified Deaths.			Notified Cases.									
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.								
METROPOLITAN COMBINED DISTRICT.																												
All ages	6	2	8	362	611	973	...	...	...	134	134	268	15	6	21	35	22	57	...	...	20	14	34	7	6	13	64	2
Under 1 year	...	...	...	8	2	10	...	...	...	7	...	...	2	...	2	...	...	...	...	...	9	4	13	3	...	3	...	...
1- 4 years	1	...	1	159	195	354	...	...	...	63	62	125	9	4	13	12	4	16	...	...	6	6	12	2	2	4	...	...
5-14 "	1	...	1	162	312	474	...	...	...	51	44	95	3	2	5	18	14	32	4	3	4	1	5	...	...	...	...	...
15-24 "	1	...	1	11	38	49	...	...	...	6	10	16	...	...	...	2	3	5	1	1	...	...	...	...	...	24	1	
25-34 "	2	1	3	6	33	39	...	...	...	5	13	18	...	...	3	...	3	...	1	1	...	1	1	...	...	27	...	
35-44 "	...	...	...	9	19	28	...	...	...	...	2	...	1	...	1	...	...	...	...	...	...	1	1	...	1	12	1	
45-54 "	...	1	1	3	5	8	...	...	...	1	1	2	...	...	...	...	...	...	...	...	1	...	1	...	2	2	1	...
55-64 "	...	...	...	...	3	3	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	1	1	...	2	2	...	...
65 and over	1	...	1	1	1	2	...	...	...	2	...	2	...	...	...	...	...	...	...	...	...	...	1	...	2	2	...	...
Not stated	...	...	...	3	3	6	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
HUNTER RIVER COMBINED SANITARY DISTRICT.																												
All ages	3	...	3	50	66	116	...	...	...	38	58	96	2	2	4	1	1	2	...	...	4	3	7	...	...	...	...	...
Under 1 year	...	...	...	...	1	1	...	...	...	3	2	5	...	...	...	...	...	...	...	...	2	...	2	...	...	...	...	...
1- 4 years	...	...	...	23	22	45	...	...	...	15	24	39	2	2	4	...	...	...	...	...	...	2	2	...	...	...	...	...
5-14 "	...	...	...	24	32	56	...	...	...	18	27	45	...	...	...	...	1	1	...	...	2	1	3	...	...	...	...	...
15-24 "	1	...	1	2	6	8	...	...	...	2	1	3	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...
25-34 "	...	...	...	...	2	2	...	...	...	...	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
35-44 "	1	...	1	1	3	4	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
45-54 "	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
55-64 "	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
65 and over	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Not stated	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
BROKEN HILL DISTRICT.																												
All ages	1	1	2	20	24	44	...	...	...	2	4	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...
Under 1 year	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1- 4 years	...	...	...	5	8	13	...	...	...	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5-14 "	1	1	2	13	14	27	...	...	...	2	1	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
15-24 "	...	...	...	2	2	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
25-34 "	1	...	1	...	2	2	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...
35-44 "	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
45-54 "	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
55-64 "	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
65 and over	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Not stated	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
SOUTH COAST HEALTH DISTRICT.																												
All ages	...	...	...	18	27	45	...	1	1	6	7	13	1	...	1	...	...	...	...	...	...	...	...	...	...	...	1	1
Under 1 year	...	...	...	...	...	...	...	...	...	1	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
1- 4 years	...	...	...	7	4	11	...	...	...	3	3	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5-14 "	...	...	...	8	16	24	...	...	...	...	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
15-24 "	...	...	...	2	2	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
25-34 "	...	...	...	...	2	2	...	...	...	2	1	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
35-44 "	...	...	...	1	2	3	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
45-54 "	...	...	...	...	1	1	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
55-64 "	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
65 and over	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Not stated	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
RICHMOND-TWEED HEALTH DISTRICT.																												
All ages	...	...	1	...	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Under 1 year	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1- 4 years	...	...	...	...	1	1	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5-14 "	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
15-24 "	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
25-34 "	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
35-44 "	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
45-54 "	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
55-64 "	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
65 and over	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Not stated	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
MITCHELL HEALTH DISTRICT.																												
All ages	...	...	...	...	...	3	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Under 1 year	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1- 4 years	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5-14 "	...</																											

GRAPH No. 7.

Typhoid Fever—Annual Death Rate per 100,000 of Population in N.S.W., 1875–1947 and Annual Case Rate per 10,000 of Population in N.S.W., 1898–1947



GRAPH No. 8.

Scarlet Fever—Annual Death Rate per 100,000 of Population in N.S.W., 1875–1947 and Annual Case Rate per 10,000 of Population in N.S.W., 1898–1947

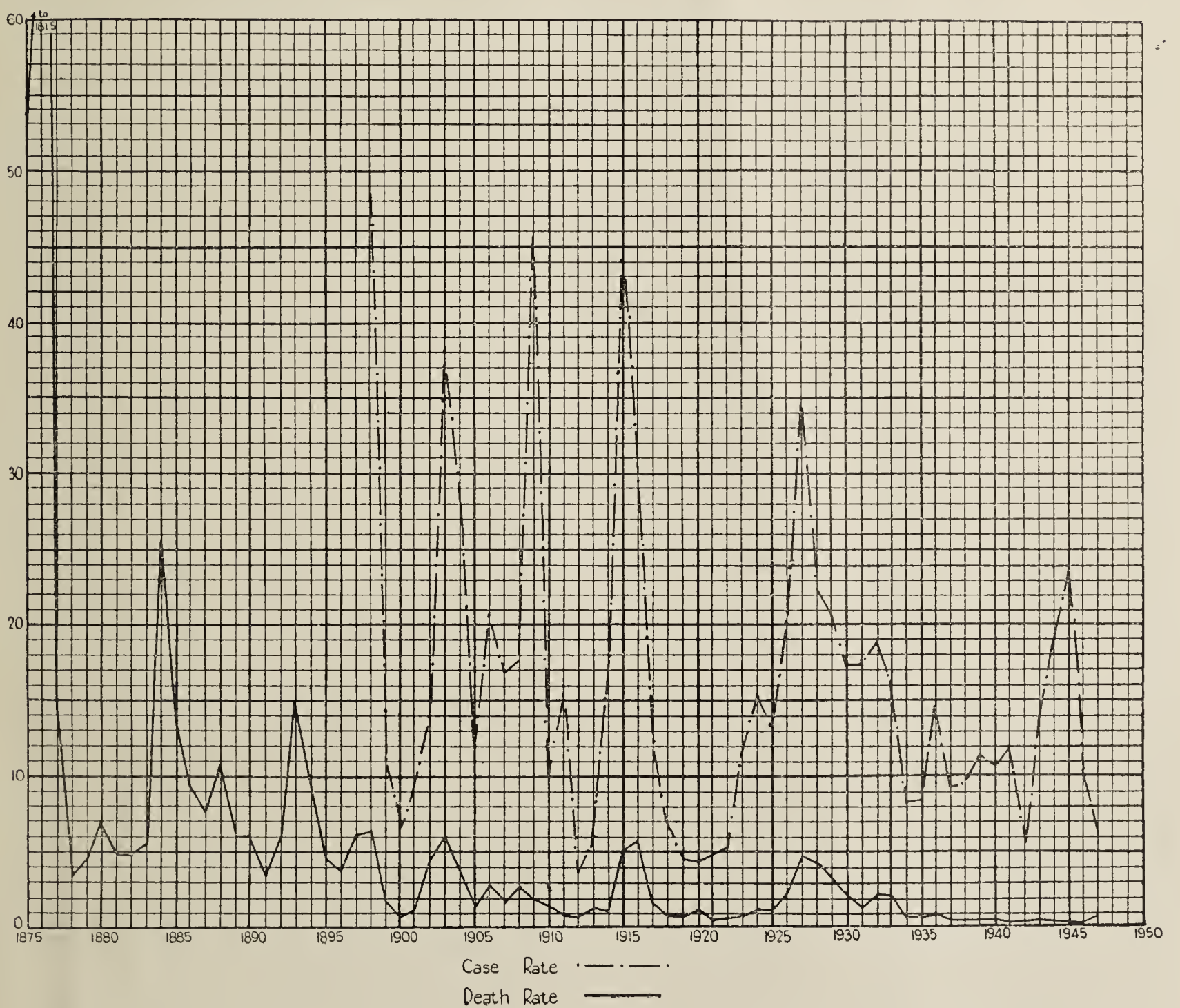


TABLE IX.—SUMMARY.

District.	Typhoid Fever.		Scarlet Fever.		Diph- theria.		Infantile Paralysis.		Cerebro-spinal Meningitis.		Encephalitis Lethargica.		Puerperal Infection.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	†† Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Metropolitan Combined Sanitary District	8	...	973	...	268	21	57	8	34	13	...	...	64	2
Hunter River Combined District...	3	...	116	...	96	4	2	...	7	...	...	...	3	...
Mitchell Health District	...	...	3	...	1	1	...	...	1	2	...	...	...	...
South Coast Health District	...	...	45	1	13	1	...	...	...	...	...	...	1	1
Richmond-Tweed Health District ...	1	...	1	...	1	13	...	...	...	2	...	...	...	...
Broken Hill District	2	...	44	...	6	...	...	...	...	...	...	...	3	...
Remainder of State—														
Municipalities	10	...	143	...	184	2	11	...	13	2	1	1	6	...
Shires	4	...	215	1	192	7	12	...	10	4	1	1	8	...
Unincorporated	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Lord Howe Island.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
A.C.T.	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	28	...	1,540	2	761	49	82	8	65	23	2	2	85	3

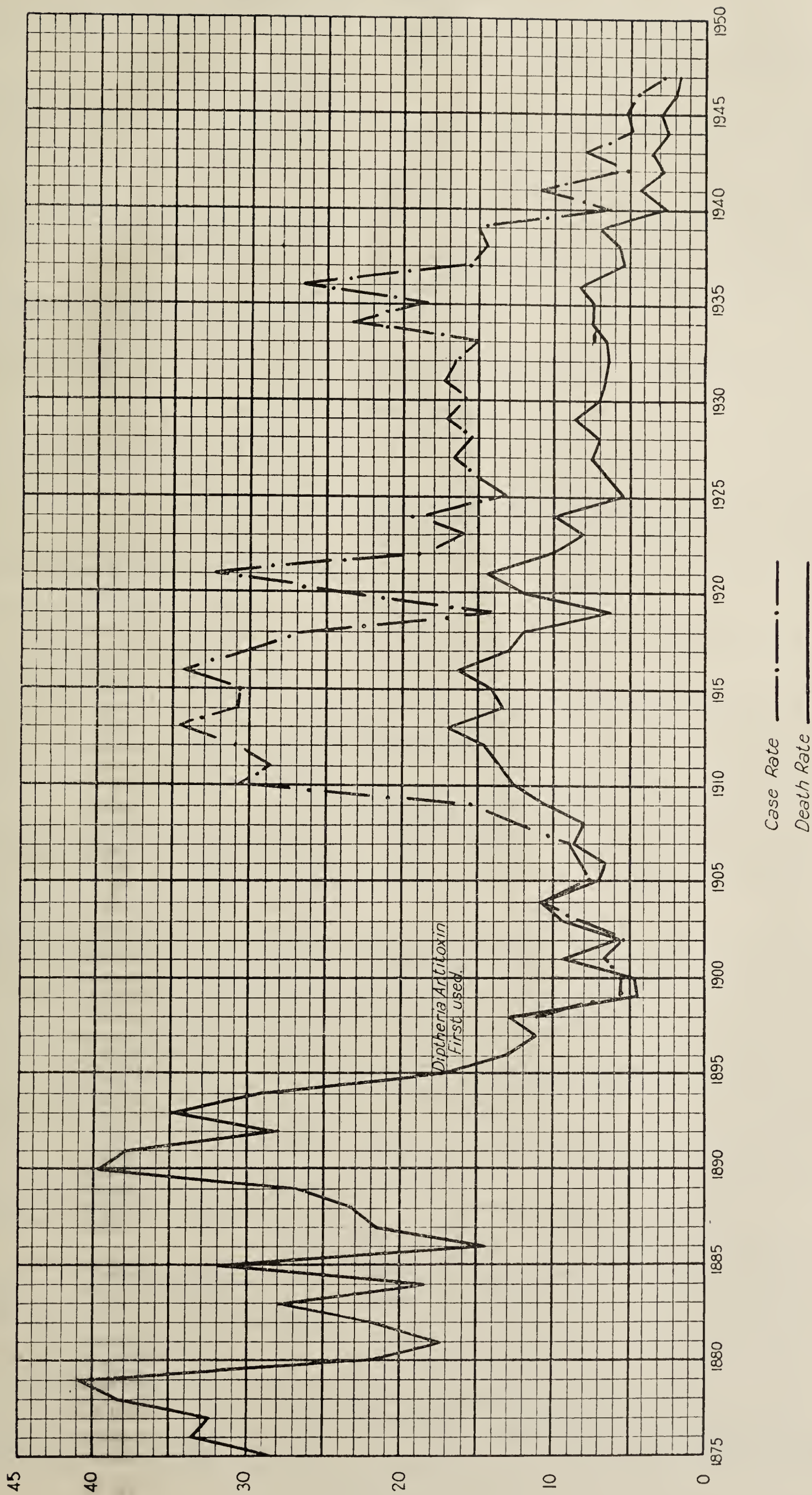
TABLE X.—Showing the number of Cases of Infectious Diseases notified in the State of New South Wales during the years 1898 to 1947 inclusive, and the number of deaths therefrom.

Year.	Mean Population.	Typhoid Fever.*		Scarlet Fever.*		Diphtheria.*		Plague.†		Infantile Paralysis.‡		Cerebro-spinal Meningitis.§		Encephalitis Lethargica.||		Pulmonary Tuberculosis.¶		Puerperal Infection.**	
		Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
1898	1,312,455	3,302	387	6,342	83	1,493	169	...	...	...	...	...	...	...	...	...	...	...	...
1899	1,333,605	2,783	347	1,389	25	741	60	...	...	...	...	...	...	...	...	...	...	...	...
1900	1,354,335	3,442	398	895	9	726	63	303	103	...	...	...	...	...	...	...	...	...	...
1901	1,366,900	2,702	291	1,288	16	922	131	...	...	...	...	...	...	...	...	...	...	...	...
1902	1,388,400	2,624	276	2,010	61	757	74	140	41	...	...	...	...	...	...	...	...	...	...
1903	1,407,400	4,855	475	5,358	87	1,214	134	2	...	...	...	...	...	...	...	...	...	...	...
1904	1,428,700	2,370	249	4,056	50	1,584	156	12	6	...	...	...	...	...	146	...	...	...	...
1905	1,454,800	2,226	239	1,773	21	1,118	102	56	21	...	...	...	...	...	128	...	...	...	...
1906	1,484,600	2,373	271	3,085	42	1,219	100	20	8	...	...	...	...	...	118	...	...	...	...
1907	1,517,900	1,972	189	2,570	26	1,376	133	51	20	...	...	...	...	...	161	...	...	...	...
1908	1,545,700	2,607	307	2,755	40	2,001	123	6	3	...	...	...	...	...	112	...	...	...	...
1909	1,577,200	2,615	287	7,178	30	2,419	166	24	7	...	...	...	...	...	196	...	...	...	...
1910	1,616,200	2,714	294	1,642	23	4,989	207	...	...	...	...	...	...	...	184	...	...	...	...
1911	1,665,265	1,864	184	2,618	11	4,784	226	...	...	...	...	...	...	...	222	...	...	...	...
1912	1,743,958	2,126	236	662	11	5,440	253	...	...	...	...	...	...	...	265	...	...	...	...
1913	1,820,066	2,187	236	1,120	23	6,380	310	...	...	47	10	...	...	...	228	...	...	...	...
1914	1,870,460	2,284	250	3,207	21	5,831	247	...	...	79	14	...	...	...	293	...	...	...	...
1915	1,891,191	1,941	219	8,335	97	5,838	264	...	...	63	11	50	33	...	361	86	...	...	...
1916	1,893,479	1,742	209	5,759	107	6,588	309	...	...	311	21	309	145	...	1,499	666	...	...	...
1917	1,905,194	1,091	103	2,255	27	5,805	247	...	...	16	12	197	98	...	1,319	584	...	...	...
1918	1,943,356	810	112	1,308	15	5,151	221	...	...	50	12	120	80	...	1,308	586	...	...	...
1919	2,000,573	857	106	959	10	2,826	114	...	...	8	3	28	23	...	1,102	678	...	...	...
1920	2,068,585	1,016	132	937	24	5,043	263	...	...	45	10	34	27	...	1,509	674	...	...	...
1921	2,108,485	949	129	1,060	8	6,854	306	2	1	184	22	30	28	...	1,240	791	...	...	...
1922	2,155,522	706	99	1,153	11	4,094	207	33	9	33	5	21	22	...	1,045	517	...	...	...
1923	2,201,531	873	104	2,623	13	3,480	176	1	1	104	8	27	22	...	1,218	657	...	...	...
1924	2,244,403	768	97	3,421	29	4,364	222	...	...	108	6	29	38	...	1,096	730	...	...	...
1925	2,295,516	533	80	3,043	27	3,004	118	...	...	57	14	37	27	...	1,195	617	...	...	...
1926	2,346,903	698	80	4,755	53	3,579	147	...	...	81	21	32	23	...	1,265	705	...	...	...
1927	2,403,881	460	68	8,369	113	4,059	179	...	...	25	4	25	10	3	27	1,158	632	...	...
1928	2,460,410	453	60	5,531	105	3,835	168	...	...	30	2	31	8	18	23	1,212	815	...	...
1929	2,503,026	438	45	5,219	78	4,274	215	...	...	241	29	28	10	26	30	1,215	1,151	44	79
1930	2,532,289	380	48	4,400	54	4,051	176	...	...	30	6	43	12	14	20	1,917	1,022	269	82
1931	2,555,871	340	35	4,477	36	4,432	168	...	...	103	10	30	9	20	16	1,588	1,014	319	83
1932	2,579,741	233	31	4,905	57	4,310	160	...	...	384	44	43	7	12	18	1,485	969	292	59
1933	2,601,782	188	28	4,259	55	3,912	169	...	...	13	4	24	5	11	15	1,441	951	222	100
1934	2,623,560	141	19	2,166	19	6,167	193	...	...	94	13	29	7	6	15	1,509	955	238	63
1935	2,645,575	173	20	2,250	18	4,913	194	...	...	181	20	29	5	7	16	1,571	939	266	72
1936	2,667,839	132	19	3,939	26	7,064	220	...	...	23	6	11	4	7	5	1,372	955	326	82
1937	2,694,679	118	18	2,493	17	4,244	143	...	...	70	††5	17	7	9	††4	1,771	991	241	52
1938	2,721,196	91	20	2,599	12	3,935	156	...	...	658	††19	22	7	11	††10	1,797	946	259	47
1939	2,749,134	63	13	3,190	11	4,103	192	...	...	33	††2	22	6	6	††4	1,687	922	243	38
1940	2,777,898	67	9	3,026	15	1,834	74	...	...	11	††1	41	13	7	††4	1,907	892	245	50
1941	2,800,537	40	8	3,385	6	3,063	121	...	...	90	††8	411	84	13	††4	1,916	934	270	29
1942	2,831,080	31	6	1,576	9	1,454	79	...	...	34	††1	879	125	12	††3	1,912	958	244	36
1943	2,857,547	24	4	3,940	13	2,268	99	...	...	25	††2	400	89	8	††2	1,722	890	224	45
1944	2,886,204	24	5	5,618	11	1,402	69	...	...	15	††2	172	59	3	††2	1,743	825	205	26
1945	2,917,415	29	2	6,977	6	1,478	84	...	...	668	††47	117	29	3	††4	1,688	803	151	13
1946	2,945,220	25	3	3,090	4	1,279	57	...	...	656	††52	89	29	3	††1	1,671	818	185	10
1947	2,985,073	28	...	1,540	2	761	49	...	...	83	††8	65	23	2	††2	1,751	816	85	12

* Notifiable from 1st January, 1898.
† " 23rd January, 1900.
‡ " 1st February, 1912. Proclamation re-issued 14th August, 1931.
§ " 1st April, 1926.
|| " 11th October, 1915.
¶ " 1904, city of Sydney only; from 1915, Metropolitan and Hunter River Districts; from 1916, Blue Mountain Districts.
** " Notification extended to whole State, March, 1929.
†† " 16th August, 1929.
††† Deaths from notifiable forms only.

GRAPH No. 9.

Diphtheria—Annual Death Rate per 100,000 of Population in N.S.W., 1875-1947 and Annual Case Rate per 100,000 of Population in N.S.W., 1898-1947



DIVISION OF SOCIAL HYGIENE.

Report of the Director, Division of Social Hygiene (J. Cooper Booth, M.B., Ch.B. (Edin.)) to the Director-General of Public Health (E. Sydney Morris, M.D., Ch.M., D.P.H.) for the year ending 31st December, 1947.

Staff.

Director—J. Cooper Booth, M.B., Ch.B. (Edin.).
 Senior Medical Officer—J. H. Abbott, M.B., Ch.M. (Syd).
 Medical Officers—Two.
 Clerical—L. Maher, four assistants and typiste.
 Senior Clinical Assistant—R. C. Lewry, with Clinic Assistant and seven attendants.

Notification of venereal disease showed a decline of 390 for the year 1947 as compared with the previous year. The total number of males having decreased by 248 (5.4 per cent.) and females by 142 (17.1 per cent.) The major decline was in notifications of gonorrhoea.

Syphilis.

New syphilitic infection is slowly increasing. The known incidence of syphilis in New South Wales is not high, but

the increased percentage of new infections coming under notice is disturbing. We possess no authority to investigate alleged or suspected sources of infection and so it is inevitable that spread of syphilis will continue.

Recommendations have been made that the powers lost when the National Security (Venereal Disease and Contraceptives) Regulations lapsed at the close of 1946, should be restored through amendments to the Venereal Diseases Act, 1918. Until such authority is available it will be impossible to bring sources of infection under control.

Prophylaxis.

Prophylactic facilities for males are available at the Divisional clinic in Sydney and at the Newcastle Hospital.

At the Divisional clinic 18,287 prophylactic treatments were given during 1947.

This represents an average of just over 50 daily.

Death of Dr. Eric Hope Staples.

It is with deep regret that we have to record the death of Dr. E. H. Staples, who died suddenly in this Division on the morning of the 26th March, 1947, before commencing duty for the day. He had been in ill health for some time.

VENEREAL DISEASES ACT, 1918.

Report on notifications received for the year ended 31st December, 1947.

Five thousand and eleven notifications of venereal disease were received during the year 1947, a decrease of 390 as compared with the previous year. Of these notifications, 13.1 per cent. came from private practitioners, as compared with 10.6 per cent. in 1946 and 12.1 per cent. in 1945.

Syphilis.

Of the total notifications received, 1,010 were for syphilis (753 males and 257 females), a figure fourteen below that for the year 1946. The sex ratio was 2.9 males to one female.

Of the cases of syphilis notified, 12.7 per cent. were being treated privately as compared with 11.2 per cent. in 1946 and 10.7 per cent. in 1945.

Syphilis contributed 20.1 per cent. to the total notifications of venereal disease as compared with 18.9 per cent. in 1946 and 18.7 per cent. in 1945.

Of the syphilitic infections notified 518 cases (51.3 per cent.) were classified as acute infection as compared with 532 (51.9 per cent.) in 1946 and 261 (30.6 per cent.) in 1945.

The notifications of syphilis gave an incidence of 33.8 per 100,000 of mean population for 1947 as compared with 35.0 in 1946 and 29.4 in 1945.

Gonorrhoea.

Of the 5,011 total notifications received during the year, 3,790 were for gonorrhoea (3,373 males and 417 females) a figure of 373 below that for 1946. The sex ratio of notified cases was 8.1 males to 1 female.

Of the cases of gonorrhoea notified 11.7 per cent. were being treated privately as compared with 8.0 per cent. in 1946 and 10.5 per cent. in 1945.

The percentage of gonorrhoea in the total notifications of venereal disease received during 1947, was 75.6 per cent. as compared with 77.1 per cent. in 1946 and 76.4 per cent. in 1945.

The notifications of gonorrhoea gave an incidence of 126.9 per 100,000 of mean population as compared with 142.3 in 1946 and 120.2 in 1945.

Other Forms of Venereal Disease.

Soft Chancre (Chancroid): Twenty-one cases (male twenty and female one) were reported.

Gonococcal Ophthalmia: One case (a female) was notified.

Venereal Warts: There were 86 notifications (75 male and 11 female).

Gleet: There were 102 notifications.

Venereal Granuloma: One case (male) was notified.

Failure to Continue Treatment.

During 1947 the names and addresses of 1,531 defaulters (1,284 males and 247 females) were notified. This figure was 233 above that for 1946.

On account of inaccurate information having been given or patients having failed to notify change of address, 572 letters were returned unclaimed—giving 37.4 per cent. unclaimed letters as compared with 36.8 per cent. in 1946 and 37.1 per cent. in 1945.

The following table shows the percentage of defaulters who remained permanent defaulters:

Year.	Total Defaulters Notified.	Resumed Treatment, Dead or Left State.	Remained in Default.	Percentage Remaining in Default.
1943 ...	1,112	836	276	24.8
1944 ...	1,129	810	319	28.2
1945 ...	1,154	689	465	40.3
1946 ...	1,298	769	529	40.7
1947 ...	1,531	913	618	40.4

Clinics.

Attendances at clinics for males totalled 84,202 (79.3 per cent. of this total representing attendances at the Health Department Clinic in the Division of Social Hygiene), as compared with 94,446 in 1946 and 70,580 in 1945.

At the clinics for females the attendances were 12,507 (50.6 per cent. of this total being at the Special Clinic at the Rachel Forster Hospital for Women and Children), as compared with 17,281 in 1946 and 21,757 in 1945.

The sex ratio of attendances was 6.7 males to one female as compared with 5.5 males to one female in 1946 and 3.2 males to one female in 1945.

Metropolitan District.—Ten clinics are available. The clinic at the Health Department is continuous during the day, closing, in regard to treatment, at 7.30 p.m. Monday, Tuesday and Thursday and at 5 p.m. on Wednesday and Friday. Prophylactic facilities are continuously available day and night at the Departmental Clinic and 18,287 prophylactic treatments were given during 1947 as compared with 16,452 in 1946 and 12,843 in 1945.

Newcastle District.—The clinic at the Newcastle Hospital provided for of those notified from the Newcastle District as compared with 52.3 per cent. in 1946 and 93.2 per cent. in 1945. Prophylactic facilities are available at Newcastle Hospital.

District General Hospitals.—Treatment is available at country hospitals as required.

Bed Accommodation.—Beds are available in the Metropolitan area for thirty-four females and twelve males.

Pathological Examinations.

In 1947, 47,692 serologic tests were made on 22,315 specimens as compared with 70,517 on 32,208 in 1946 and 57,678 on 25,533 in 1945.

During 1947, 9,755 smears were examined for gonococci as compared with 14,783 in 1946 and 13,527 in 1945.

Examinations for treponema pallidum numbered 635 in 1947 as compared with 586 in 1946 and 222 in 1945.

Prosecutions.

Action was taken against 403 persons for breach of section 5 of the Act (failure to continue under treatment). This is an increase of eighty-nine over the number proceeded against during 1946.

The Following Tables are Appended.

TABLE 1.—Notifications received during the year 1947 arranged in order of district from which notifications came.

TABLE 2.—Return of cases of venereal disease notified during 1947 showing forms of disease and age and sex of patients.

TABLE 3.—Summary of total attendances at various public clinics during 1947.

TABLE No. 1.—Notifications received during 1945 to 1947 arranged in order of districts.

	Metropolitan Area.			Newcastle District.			Remainder of State.		
	1945	1946	1947	1945	1946	1947	1945	1946	1947
Gonorrhoea	3,148	3,665	3,255	215	339	407	123	159	128
Syphilis	776	949	866	35	34	41	41	41	103
Soft Chancre	5	3	21	...	...	...	...	...	...
Gleet	126	114	101	...	...	1	...	...	...
Ven. Warts	81	96	86	...	...	...	...	...	...
Gon. Ophthal.	7	...	...	...	...	...	2	...	1
Ven. Granuloma ...	3	1	...	...	...	...	...	...	1
Total	4,146	4,828	4,329	250	373	449	166	200	233

TABLE No. 2.—Return of cases of venereal diseases notified during 1947 showing forms of disease and age and sex of patient.

	0-5		6-10		11-15		16-20		21-25		26-30		31-35		36-40		41-45		46-50		Over 50		Age not Stated. Totals.				Grd. Total
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M. F.
Gonorrhoea	...	5	2	4	3	5	310	100	956	133	702	79	431	46	252	25	153	7	66	6	79	4	419	3	3,373	417	3,790
Syphilis	5	2	2	2	3	...	56	53	126	55	114	33	74	34	92	25	57	13	39	13	80	18	105	9	753	257	1,010
Soft Chancre	...	...	...	...	...	...	...	...	2	...	2	...	1	1	2	...	...	...	...	...	...	13	...	20	1	21	
Gleet	...	...	...	...	...	...	...	...	12	...	28	...	20	...	15	...	7	...	12	...	8	...	...	102	...	102	
Ven. Warts	...	...	...	...	...	...	8	3	26	4	13	...	8	1	6	1	7	...	...	1	1	1	6	...	75	11	86
Gon. Ophthalmia	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	6	...	...	1	1
Ven. Granuloma	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Totals	5	8	4	6	6	5	374	156	1,122	192	859	112	535	82	367	51	224	20	117	20	168	23	543	12	4,324	687	5,011

TABLE No. 3.—Table showing annual attendance returns at public clinic for treatment of venereal diseases—1945, 1946 and 1947 inclusive.

Year.	Attendances.			New Cases.					
	Male.	Females.	Total.	Gonorrhoea.			Syphilis.		
				Male.	Female.	Total.	Male.	Female.	Total.
HEALTH DEPARTMENT CLINIC.									
1945	52,733	...	52,733	1,421	...	1,421	280	...	280
1946	80,734	...	80,734	2,011	...	2,011	282	...	282
1947	66,817	...	66,817	1,486	...	1,486	321	...	321
ROYAL PRINCE ALFRED HOSPITAL.									
1945	6,708	2,935	9,643	70	69	139	36	39	75
1946	4,523	3,136	7,659	151	36	187	45	20	65
1947	8,080	2,360	10,440	389	35	424	69	52	121
SYDNEY HOSPITAL.									
1945	2,128	1,159	3,287	47	8	55	17	13	30
1946	2,375	817	3,192	50	4	54	34	18	52
1947	4,396	906	6,002	455	5	460	37	18	55
ROYAL ALEXANDRA HOSPITAL FOR CHILDREN.									
1945	350	982	1,332	...	39	39	3	5	8
1946	284	580	864	...	2	2	1	2	3
1947	213	406	619	...	3	3	2	3	5
ROYAL SOUTH SYDNEY HOSPITAL.									
1945	190	162	352	6	...	6	1	2	3
1946	152	99	251	3	...	3	2	1	3
1947	145	125	270	4	1	5	2	...	2
ROYAL NORTH SHORE HOSPITAL.									
1945	644	875	1,519	1	5	6	4	5	9
1946	717	774	1,491	6	3	9	6	5	11
1947	722	727	1,449	17	...	17	10	9	19
BALMAIN DISTRICT HOSPITAL.									
1945	441	497	938	...	...	...	1	...	1
1946	432	476	908	...	...	...	1	1	2
1947	416	458	874	...	...	...	...	2	2
NEWCASTLE DISTRICT HOSPITAL.									
1945	7,071	1,754	8,825	150	54	204	18	11	29
1946	4,865	1,327	6,192	147	21	168	17	10	27
1947	3,126	1,091	4,217	136	16	152	21	5	26
RACHEL FORSTER HOSPITAL FOR WOMEN.									
1945	...	13,130	13,130	...	369	369	...	102	102
1946	...	9,846	9,846	...	331	331	...	84	84
1947	...	6,327	6,327	...	203	203	...	74	74
PARRAMATTA DISTRICT HOSPITAL.									
1945	315	263	578	...	...	...	3	2	5
1946	364	226	590	2	2	4	12	2	14
.....	287	107	394	10	1	11	3	1	4

CONSULTATIVE COUNCIL FOR PHYSICAL HANDICAPPED PERSONS. (ACUTE ANTERIOR POLIOMYELITIS.)

The Consultative Council on Physically Handicapped Persons has continued to investigate and assist in matters relating to the treatment and after-care of poliomyelitis, and to arrange for vocational training of other referrals coming under the category of physically handicapped persons.

* *Notifications of Poliomyelitis, January—December, 1947:*—Seventy-eight notifications were received during the year.

An additional thirteen notifications were later cancelled, owing to amended diagnoses:—

Disseminated Sclerosis, 1; Polyneuritis, 1; Mumps Encephalitis, 1; Rheumatic Fever, 1; Otitis Media, 1; Osteomyelitis, 1; Functional, 3; Observation only, 4.

Monthly incidence according to the date of onset of illness was as follows:—

Table I.

January	9 cases
February	5 "
March	15 "
April	5 "
May	4 "
June	5 "
July	4 "
August	2 "
September	4 "
October	9 "
November	8 "
December	6 "
76 cases	

The two remaining had their onset in October and December, 1946.

Geographical Distribution.—Fifty-four cases were from the Metropolitan area; twenty-four cases were from the following Rural districts—Shires—Wyang, 2; Manning, 1; Wade, 1; Weddin, 1; Inlay, 1. Municipalities—Dubbo, 1; Penrith, 1; Bathurst, 3; Holroyd, 1; Richmond (R.A.A.F. Station), 2; Cooma, 1; Bega, 1; Lockhart, 1; Berrigan, 1; Snowy River, 1; Crookwell, 1; Leeton, 1; Hay, 2 Culeairn, 1.

Hospital Accommodation.—Sixty-one patients were admitted to Metropolitan Hospitals, sixteen to country hospitals and one was nursed at home.

Sex Incidence.—Forty-four cases (56.4 per cent.) were males; thirty-four cases (43.6 per cent.) were females.

Age distribution: Ages ranged from 14 months to 59 years; 47 cases (60%) were under the age of 10 years.

TABLE II. (78 cases).

Ages.	Males.	Females.	Total.	Per Cent.
Under 1 yr.	...	...	...	...
1 — 4 yrs.	13	8	21	26.9
5 — 9 "	15	11	26	33.3
10 — 14 "	7	6	13	16.7
15 — 19 "	4	3	7	9
20 — 30 "	3	3	6	7.7
30 — 40 "	3	1	4	5.1
Over 40 yrs.	...	1	1	1.3
Total	45	33	78	100.0

Severity: Of the 78 cases 55 (33 males, 22 females) had some form of paralysis, 23 (11 males, 12 females) were non-paralytic.

The 55 paralytic cases were followed up 12-15 months after the onset of illness—15 showed no after-effects, 11 had mild paresis, 23 had residual paralysis varying from moderate to severe, and 6 had died.

TABLE III.—Forms of paralysis and severity (55 cases).

Form.	Severe-moderate	Slight.	No paresis	Fatal.
Spinal (45 cases)	22	10	12	1
Bulbar or Bulbo-spinal (8 cases)	1	1	3	3
Combined with Encephalitis (2 cases)	...	...	...	2
	23	11	15	6

Deaths: 6 cases (7.7%) died. 4 males, 2 females.

* Compiled as from date of onset.

TABLE IV.—Fatal cases (6).

Case.	Sex.	Age at onset.	Duration of Illness.	Form.	Remarks.
A.M.	M.	18 yrs.	6 weeks	Bulbar poliomyelitis.	Halfe-easte. Pentfleet Aborig-inal Station.
S.D.	F.	13 "	5 days	Bulbar poliomyelitis.	.....
L.M.	M.	5 "	7 "	Anterior poliomyelitis.	History of a "cold," and "diarrhoea" 7 days previous to onset.
P.M.	F.	13 "	3 "	Polio-encephalomyelitis.	.....
G.M.	M.	7 "	10 "	Polio-encephalitis.	.....
J.L.	M.	9 "	3 "	Bulbar poliomyelitis.	Tonsillectomy 2 weeks previously, followed by post-operative haemorrhage.

After-care of Poliomyelitis patients: The Council continued to circularize medical practitioners, hospitals, and patients, in an endeavour to follow the progress of each notification of poliomyelitis.

Visits were made by the Almoner, and Medical Officer to the hospitals and institutions treating cases, and when necessary, patients were seen in their homes (75), or interviewed at 52 Bridge Street (49).

After-care Activities included:—

- (a) Payment for musele re-education given at the Far West Home, Manly (£304 18s. 8d.).
- (b) Payment for physiotherapy to patients (10) unable to travel to Out-patient Departments, or to afford private fees (£201 11s. 3d.).
- (c) Transport to Orthopaedic Clinics (£7 18s.).
- (d) Payment for appliances (£3 16s.) and arrangements for purchase of calipers, crutches, and corset for a badly paralysed girl, and a eorset for a woman for whom the Council paid physiotherapy fees for a period of 18 months.

Vocational Training: In January, 1947, advice was received that the annual draft estimate of expenditure for vocational training of physically handicapped persons had been reduced to £1,500.

Expenditure on Vocational Training during 1947 amounted to £344 12s. 9d., comprising accommodation £235 10s., fees and equipment £88 18s. 9d., and transport £20 4s.

Two persons completed their courses, a girl in business principles, and a boy in wool-classing.

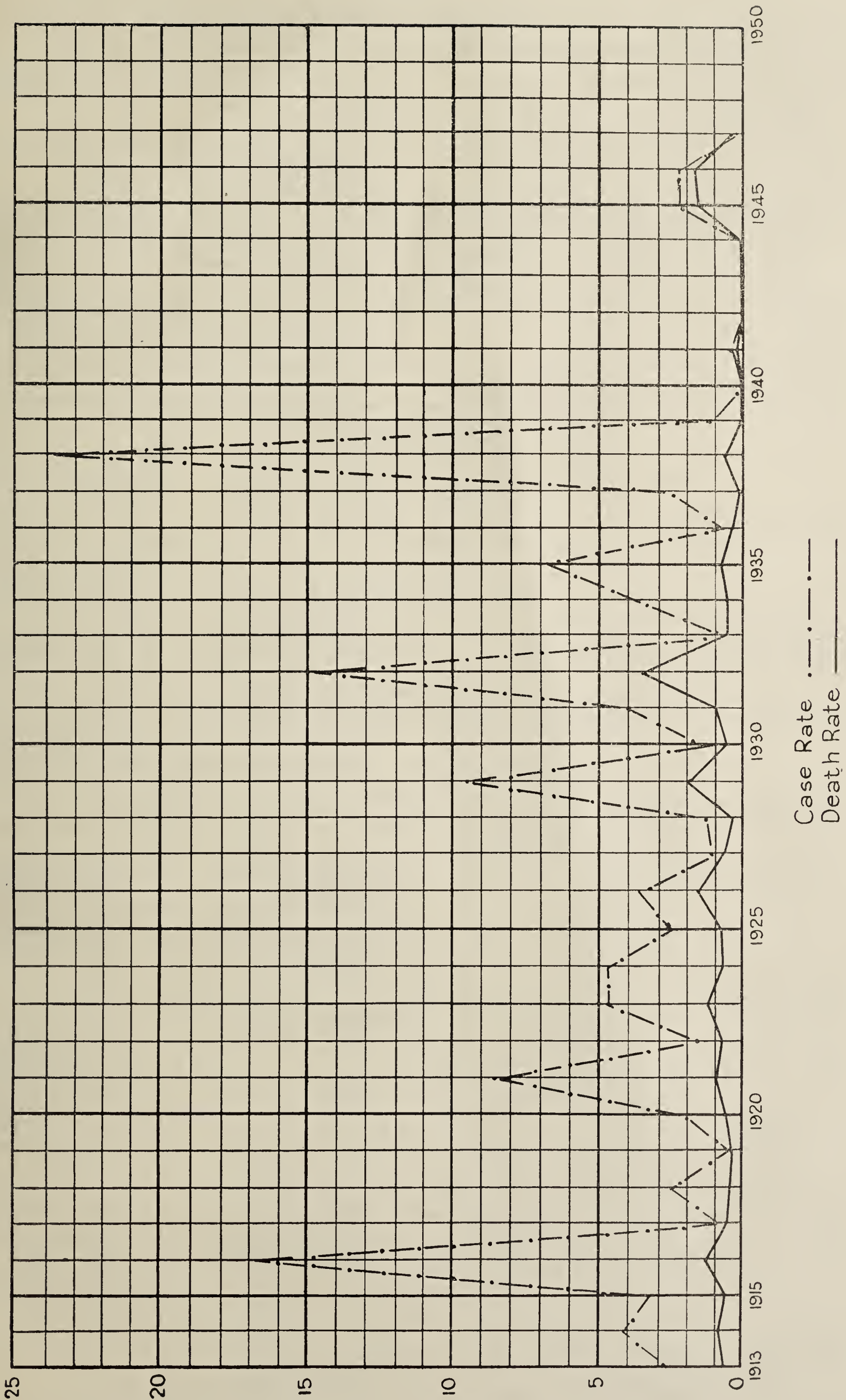
At the end of the year, four were receiving training:—

- (1) S.A. (F.) æt 15 years, referred by the N.S.W. Society for Crippled Children for a course in business principles, suffering from ataxia, kyphosis, and scoliosis. Despite her disabilities she has had good reports during her course.
- (2) L.W. (M.) æt 16 years, referred by the N.S.W. Society for Crippled Children for a correspondence course in accountancy, has had recurrent osteomyelitis, necessitating frequent periods in hospital. He has made good progress, gaining 90 per cent. marks in the certificate of proficiency examination.
- (3) S.C. (F.) æt 15 years, referred by the N.S.W. Society for Crippled Children had years of hospitalization with a tubercular spine. She is training in hairdressing at the Sydney Technical College, has had excellent reports, and has almost completed her course.
- (4) G.C. (M.) æt 12 years, referred by the Anstralian Association of Occupational Therapists, has a R. hemiplegia following a cerebral haemorrhage. The Council is paying for this boy's tuition in basketry, weaving, and leather-work, and for his fares, with those of an escort to and from the Clinic.

Owing to lack of city accommodation, trainees are still limited to those living in or near the metropolitan area.

The Premier and Colonial Treasurer, having approved in principle of the plan for establishing a hostel to accommodate country trainees, the Council is endeavouring to find a suitable property.

GRAPH No. 10.
Infantile Paralysis—Annual Death Rate and Case Rate per 100,000 of the Population in New South Wales, 1913-1947.



B. PUBLIC HEALTH ADMINISTRATION.

REPORT OF THE GOVERNMENT ANALYST FOR THE YEAR ENDED 31st December, 1947.

Staff.

Government Analyst: Harold B. Taylor, M.C., V.D., D.Sc., F.I.C., F.A.C.I.
Second Government Analyst: Arthur D. Dibley, A.S.T.C., A.A.C.I.
Senior Assistant Government Analyst: Robert G. O'Brien, A.S.T.C., A.A.C.I.
Analysts: Ernest S. Ogg, B.Sc. (Hon.), A.A.C.I.; William F. Fisher, A.S.T.C., A.A.C.I.; Ronald C. Sparks, A.S.T.C., A.A.C.I. (resigned February, 1947); Thomas A. McDonald, A.S.T.C., A.A.C.I.; Edward R. Cole, B.Sc., M.P.S.; Anthony Dadour, B.Sc.; John Plowman, A.S.T.C.; Lister Clark, A.S.T.C.; C. Anderson, B.Sc., A.A.C.I. (resigned 30th May, 1947); J. W. G. Neuhaus, A.S.T.C., A.A.C.I.
Laboratory Assistants: Victor Williams; John A. Horan, H.D.D.; Ronald McDonough.
Laboratory Attendant: Ivan Ratcliffe.
Shorthandwriter and Typist: Marie Kemp.
Two Office Assistants: Vera Spiers, Margaret Ryan.

A total of 28,612 samples were examined in the Chemical Laboratory during the period under review, representing an increase of 2,485 samples over those examined during the previous year.

The total comprised 25,788 samples examined for the purposes of the administration of the Pure Food Act, 2,766 samples examined for the Public Services of the State, and 58 samples examined for Defence Authorities.

Milk: The number of milk samples examined for the purposes of the Pure Food Act amounted to 19,071, including 9,744 samples collected by Food, Municipal and Shire Inspectors in the Metropolitan Area, 2,856 samples collected in the country districts, and 6,471 samples collected by Inspectors of the Milk Board.

Of the total number of milks collected in the metropolitan area, 2.05 per cent. contravened the standard, while 6.65 per cent. of those collected in the country and 2.4 per cent. of those submitted by the Milk Board failed to conform.

The following is a table giving full particulars of the district of collection, number of samples examined, and nature and proportion of adulterations found:

Particulars of Milk Adulterations.								
District of Collection.		Metropolitan Areas.		Country Districts.		Submitted by Milk Board.		Total.
Number of Samples Collected		9,744		2,856		6,471		19,071
		No.	Per cent.	No.	Per cent.	No.	Per cent.	No. Per cent.
<i>Number and Proportion of Adulterated Samples—</i>								
Deficient in milk-fat		75	0.76	104	3.64	114	1.76	293 1.53
Contained added water		117	1.2	78	2.73	41	0.63	236 1.23
Deficient in milk-fat and contained added water		9	0.09	8	0.28	1	0.01	18 0.09
Total Adulterations		201	2.05	190	6.65	156	2.40	547 2.85

The samples other than milk submitted in connection with the administration of the Pure Food Act amounted to 6,717, of which 641 failed to conform to prescribed standards.

The following table gives particulars of the whole of the food and drug adulterations recorded:—

Nature of Sample.	Number of Adulterated Samples.	Particulars of Adulteration.
Almond Oil	1	Found to be peanut oil.
Apples, Dried.....	1	Unsuitable for sale to the public.
A.P.C. Powder	1	Discoloured and unsuitable for sale.
Beer.....	6	Contained added water.
Bread	89	Physical characteristics unsatisfactory.
„ Brown	32	Deficient in crude fibre.
„ Wheatmeal	11	do do
„ Wholemeal	6	do do
„ „	2	Incorrectly labelled.
„ White	2	Excess moisture.
„ Procera White	1	do do
„ Rolls, buttered	2	Found not to be butter.
Brine	1	Contained foreign matter and impurities.
Butter	1	Excess water.
„	2	Excess water and deficient in milk-fat.
„ Aid	1	Term “ butter ” considered to be misleading.
Cakes	3	Undercooked and unfit for human consumption.
Cheese, tinned	17	Excess tin content.
Cherry Cordial, Imitation	1	Found to contain saccharin
Carried forward	180	

Nature of Sample.	Number of Adulterated Samples.	Particulars of Adulteration.
Brought forward	180	
Citrus Cocktail	1	Excess tin content.
„ Cup	1	Incorrectly labelled.
Clouding Material	1	Contained formaldehyde.
Cod Liver Oil	1	Found to be in an unsuitable condition.
Coffee and Chicory Essence	1	Deficient in caffeine.
Coffee and Chicory with Cereals.....	1	Deficient in coffee.
Confectionery.....	5	Found to contain anti-mony.
Containers, for packing of food.....	1	Composed of zinc.
Cream	2	Deficient in milk-fat.
Cream of Tartar Substitute	1	Not labelled in accordance with regulations.
Creaming Soda	1	Found to contain saccharin
Dripping	5	Unsuitable for use in the preparation of food.
Figs, Dried	1	Unsuitable for sale.
Fish. Smoked	3	Deteriorated and unsuitable for food.
Ginger Ale	1	Found to contain saccharin.
Ginger Beer	1	Found to contain saccahrin.
Ginger, Preserved	2	Coated with gelatine.
Grape Fruit Cordial	1	Incorrectly labelled.
Icing Mixture.....	1	Excess cornflour.
Jam	1	Inferior pulp used in manufacture.
„	1	Made from proportion of unsound fruit.
„	2	Tins blown and contents unsuitable for human consumption.
Carried forward	215	

Nature of Sample.	Number of Adulterated Samples.	Particulars of Adulteration.
Brought forward	215	
Kola	4	Found to contain saccha- rin.
Lemon Cordials, Drinks, etc.	3	Contained added organic acid.
" " " " "	4	Excess tin content.
" " " " "	1	Low sugar content.
" " " " "	1	Excess preservative.
Lime Drinks, Cordials, etc.	1	Contained added organic acid.
" " " " "	1	Found to contain saccha- rin.
" " " " "	1	Excess preservative.
Meat, Fresh	4	Illegally preservatised.
" Minced	122	"
" Sausages	148	Excess of " permitted preservative.
" Tripe	4	Illegally preservatised.
" " " " "	5	Did not comply with limits of pH.
" " " " "	1	Badly discoloured.
" Smoked Mutton.....	9	Artificially coloured.
Milk, Fresh.....	293	Deficient in milk-fat.
" " " " "	236	Contained added water.
" " " " "	18	Deficient in milk-fat and contained added water.
Oatmeal	1	Slightly deteriorated.
Orange Cordial, Drinks, etc.	2	Deficient in fruit juice.
" " " " "	1	Incorrectly labelled.
" " " " "	2	Excess preservative.
" " " " "	1	Found to contain saccha- rin.
Orange and Lemon Juice Cordial.	1	Incorrectly labelled.
Passionfruit Cordial	1	Deficient in passionfruit and incorrectly labelled.
" " " " "	1	Excess preservative.
Peas, tinned	3	Artificially coloured.
Peppermint Cordial	1	Incorrectly labelled and contained excess pre- servative.
Pickles	1	Fermented and unsuitable for sale.
" " " " "	1	Contained sodium benzoate.
" " " " "	1	Coloured with copper.
Pineapple Cordial, Drinks, etc.	2	Excess tin content.
" " " " "	1	Incorrectly labelled.
" " " " "	1	Contained artificial flavouring essence.
Raspberry Cordial.....	1	Deficient in raspberry juice.
Soap	1	Excess sodium carbonate.
" " " " "	1	Deficient in fatty acids and excess sodium carbonate and alkalinity.
" " " " "	9	Deficient in fatty acids.
" " " " "	1	Deficient in fatty acids and excess sodium carbonate.
" " " " "	1	Contained sodium silicate (not permitted by regulation).
" " " " "	6	Deficient in fatty acids and contained sodium silicate
Soda Squash	1	Incorrectly labelled.
Spirits—(Licensing In- spectors).	3	Contained added water.
Spirits—(Licensing In- spectors) O.P. Rum	3	Found to be underproof.
Strawberry Cordials, Drinks, etc.	1	Incorrectly labelled.
" " " " "	1	Contained artificial flavouring essence.
Tea	1	Contained potassium per- manganate.
Tomatoes, tinned	2	Excess tin content.
Tomato Sauce	1	Illegally preservatised.
" " " " "	1	Artificially coloured.
" " " " "	2	Illegally preservatised and artificially coloured.
Tomato Soup.....	1	Artificially coloured.
Vanilla Essence	2	Found to be imitation essence.
" " " " "	1	Deficient in alcohol.
Walnuts	2	Unfit for human con- sumption.
Wine	3	Deteriorated and unsuitable for human consumption.
" " " " "	2	Somewhat unsound.
Total	1,139	

Samples submitted for the Public Services of the State.—The samples submitted for the Public Services of the State (exclusive of those examined for Defence authorities) amounted to 2,766, brief particulars of which are given hereunder:—

Subsidised Institutions.—Subsidised Institutions required the examination of 379 samples, consisting of food, drugs, human hair and nails, urine, stomach washings, etc.

The Government Stores Department submitted 450 samples for examination, including drugs and pharmaco-
poeial substances, foods, soaps, inks, insecticides, disin-
fectants, lubricants, etc.

Police Authorities required the examination of 517 ex-
hibits in connection with criminal investigations, includ-
ing six exhibits in regard to the administration of the
Police Offences Amendment (Drugs) Act. Seven exhibits
of animal viscera were also received, three of which
were found to contain arsenic.

The following table gives details of the criminal charges
investigated.

Particulars of Charge.	Number of Exhibits.
CRIMINAL INVESTIGATIONS.	
Abortion	8
Administer poison with intent to murder	8
Alleged breach of Motor Traffic Act	3
Alleged arsenical poisoning.....	10
Attempted murder and suicide	8
Break, enter and steal	16
Drunken driving	9
Fail to stop after accident	6
Inflict bodily harm	2
Malicious wounding	6
Negligent driving	5
Stealing	14
Suicide	6
Suspected poisoning.....	38
Uncertified deaths	346
Wanton Driving	2
Miscellaneous	24
Total	511

Police Offences Amendment (Drugs) Act:	
Morphine	6

Coroners' Inquiries.—Coroners required the examination of
exhibits in connection with 198 deaths which formed the sub-
ject of police investigation.

The following table gives particulars of the results of
chemical examination:—

Nature of exhibit.	Result of Chemical Examination.	Number of Deaths.
Viscera (Stomach and contents, intestines and solid organs).	Negative for poison	48
" " " " "	Acetylsalicylic acid and barbituric acid derivative.	1
" " " " "	Arsenic	10
" " " " "	Barbitone	1
" " " " "	Barbiturates	5
" " " " "	Bromosom (Bromural)	2
" " " " "	Chloral hydrate	4
" " " " "	Chloral hydrate and bromide	2
" " " " "	Cresol	1
" " " " "	Cyanide.....	3
" " " " "	Hydrocyanic acid	1
" " " " "	Lead	1
" " " " "	Manganese	1
" " " " "	Nembutal	1
" " " " "	Nicotine	3
" " " " "	Phenobarbital.....	1
" " " " "	Phenobarbitone	1
" " " " "	Potassium bromide and barbiturate	1
" " " " "	Salicylic acid	1
" " " " "	Strychnine	8
" " " " "	Strychnine and brucine	1
" " " " "	Sulphadiazine	1
" " " " "	Veronal (diethyl barbituric acid).....	1
" " " " "	Zinc	1
Viscera and blood	Negative for poison; positive for alcohol	5
" " " " "	Positive for chloral hydrate and alcohol ...	1
" " " " "	Negative for poison and alcohol	1
" " " " "	Positive for phenobarbital and alcohol	1
Viscera and urine	Viscera: negative for poison; urine con- tained trace of atropine.	1
" " " " "	Positive for strychnine	1
" " " " "	Negative for poison; positive for alcohol	2
" " " " "	Positive for phenobarbitone	1
Viscera, urine and blood	Positive for alcohol	1
" " " " "	Negative for alcohol	1
Blood and urine	Positive for alcohol	2
Blood	Positive for alcohol	44
" " " " "	Negative for alcohol	10
" " " " "	Positive for alcohol and negative for drowning.	1
" " " " "	Positive for drowning	2
" " " " "	Positive for carbon monoxide and drowning.	1
" " " " "	Positive for carbon monoxide	3
" " " " "	Negative for carbon monoxide	3
" " " " "	Negative for sulphuretted hydrogen	1
Urine	Positive for alcohol	15
" " " " "	Negative for alcohol	1
Total Deaths		198

State Municipal and Departmental Authorities submitted 454 samples of water in connection with the supervision and chemical treatment of country water supplies and swimming pools, and 171 samples for the purpose of checking the efficiency of sewage installations and the control of the discharge of trade wastes and drainage into public places.

Industrial Hygiene Authorities required the examination of 362 samples in connection with claims under the Workers' Compensation Act, the diagnosis of illness due to occupational causes, conditions of employment in workshops and factories, the ventilation of public halls and theatres, etc.

Miscellaneous Authorities submitted 228 samples for examination, including food, bedding materials, insecticides, lubricants, etc.

Defence Authorities submitted fifty-eight samples for examination brief details of which are given hereunder:—

The *Department of the Army* forwarded fifty-three samples for examination, including foodstuffs, insecticides, soap, etc.

The *Department of the Air Force* submitted one sample of motor spirit for examination.

The *Royal Edward Victualling Yard* submitted four samples for examination, including mustard and sacramental wine.

TABLE I.

Samples examined during the year 1947 for the purposes of the administration of the Pure Food Act, 1908.

Nature of Sample.	Submitted by.	Number examined.	Number Adulterated or falsely described.
Almond Oil	Food Inspectors	2	1
A.P.C. Powders	" "	4	1
Apple Juice	" "	1	0
Apples, Dried	" "	1	1
Beer	" "	56	6
Bread	" "	286	6
"	Municipal Inspectors	10	9
Breakfast Food	Food Inspectors	1	0
Brine	" "	1	1
Butter	" "	7	3
Butter Aid	" "	1	1
Cakes	" "	2	0
"	Municipal Inspectors	3	3
Cheese, Tinned	Food Inspectors	17	17
Cherry, Imitation Cordial	" "	1	1
Chutney	" "	3	0
Citrus Cocktail Drinks, etc.	" "	4	2
Cleaning Agent	" "	1	0
Clouding Material	" "	1	1
Coca Cola	" "	1	0
Cochineal Essence	" "	1	0
Cod Liver Oil	" "	4	1
Coffee and Chicory Essence	" "	1	1
Coffee with chicory and cereals ..	" "	1	1
Confectionery	" "	8	5
"	Municipal Inspectors	1	0
Containers, Food	Food Inspectors	1	1
Cream	" "	97	0
"	Milk Board	146	2
Cream of Tartar	Food Inspectors	2	1
Creaming Soda	" "	1	1
Dripping	" "	11	5
Figs, White, Dried	" "	1	1
Fish, Smoked, Tinned, etc.	" "	6	3
Flour, Wheatmeal	" "	3	0
Fruit Cup Cordials, Drinks, etc. ..	" "	5	0
Ginger Ale	" "	2	1
Ginger Beer	" "	1	1
Ginger	" "	4	2
Grape Fruit Drinks, Cordials, etc.	" "	7	1
Honey	" "	5	0
Ice Cream, Snow Cream, etc....	" "	25	0
Iceing Mixture	" "	1	1
Jam	" "	30	4
Jelly Crystals	" "	5	0
Kola	" "	7	4
"	Municipal Inspectors	1	0
Lemon Drinks, Cordials, etc....	Food Inspectors	21	9
Lemon Essence	" "	2	0
Lime Drinks, Cordials, etc.	" "	9	3
Material from floor	" "	2	0
Meal	" "	3	0
Meat, Fresh	" "	532	4
"	Municipal Inspectors	3	0
" Minced	Food Inspectors	1,825	114
"	Municipal Inspectors	72	8
" Sausages	Food Inspectors	2,337	130
"	Municipal Inspectors	127	18
" Tripe	Food Inspectors	661	10
"	Municipal Inspectors	4	0
" Smallgoods	Food Inspectors	98	0
" Luncheon Beef	" "	1	0
" Cooked sheep's kidneys....	" "	1	0
" Pies	" "	3	0
" Smoked Mutton	" "	13	2
" Cooked sausages.....	" "	1	0
" Lamb and green peas, tinned ..	" "	1	0
" Sausage skins	" "	1	0
Methyl Violet	" "	1	0

TABLE I—continued.

Nature of Sample	Submitted by.	Number examined.	Number Adulterated or falsely described.
Milk, Fresh	Food Inspectors, Metropolitan Districts.	7,389	181
" "	Municipal and Shire Inspectors, Metropolitan Districts.	2,355	20
" "	Food Inspectors, Country Districts.	1,510	120
" "	Municipal and Shire Inspectors, Country Districts.	1,346	70
" "	Milk Board	6,471	156
" Powdered	Food Inspectors	1	0
" Condensed	Municipal Inspectors	1	0
" Concentrated	Food Inspectors	1	0
Mugs, Drinking	" "	4	0
Nuts	" "	1	0
Oatmeal.....	" "	1	1
Olive Oil	" "	1	0
Orange Cordials, Drinks, etc....	" "	25	6
Orange and Lemon Cordials, Drinks, etc.	" "	7	1
Passionfruit Cordials	" "	4	2
Pastry, Tarts	" "	2	0
Peas, Tinned.....	" "	4	3
Peppermint Cordials	" "	1	1
Phenobarbitone Tablets.....	" "	3	0
Pickles	" "	5	3
Pills, Medicinal.....	" "	2	0
Pineapple Cordials, Drinks, etc.	" "	10	4
Preservatives	" "	2	0
Raspberry Cordials	" "	2	1
Sarsaparilla Cordial	" "	1	0
Sauce	" "	2	0
Smoking Material	" "	2	0
Soap	" "	53	19
Soda Squash	" "	1	1
Soup, chicken	" "	1	0
Spirits	" "	14	0
"	Licensing Inspectors	6	6
Strawberry Cordials, etc.	Food Inspectors	2	2
Sugar	" "	2	0
Tea	" "	10	1
Tin Foil	" "	1	0
Tomatoes, Tinned	" "	6	2
Tomato Juice	" "	1	0
" Sauce	" "	9	4
" Soup	" "	3	1
Twin Vita Fruit Juice Cordial ..	" "	1	0
Vanilla Essence	" "	4	3
Vegetable and Yeast Extracts ..	" "	1	0
Vinegar	" "	2	0
Walnuts.....	" "	2	2
Water, Rinse	Milk Board	1	0
Wine	Food Inspectors	17	5
Total		25,788	1,139

TABLE II.

Samples examined during the year 1947 for the Public Services of the State.

Authority Submitting.	Nature of Sample.	Number of Samples.
<i>Subsidised Institutions</i>	Absolute Alcohol	1
	Blood	5
	Bread	14
	Celery	1
	Cerebrospinal Fluid	3
	Faces	2
	Foodstuffs	12
	Fruit	2
	Hair, Human	13
	Insecticides	3
	Meat, Fresh	159
	Medicines	3
	Milk, Fresh—for infant feeding ...	3
	Milk, Human	85
	Nails, Human	10
	Opium	1
	Pills, Medicinal	1
	Polish, Floor	2
	Potassium Bromide	1
	Procaine Hydrochloride	1
	Stomach Contents	6
	Urine	47
	Vegetables	1
	Vomit	2
	Water	1
<i>Government Stores Department</i> ...	Acetic Acid	6
	Acetone.....	1
	Acetylsalicylic Acid Powder	1
	" Tablets	2
	Adrenaline Ampoules	1
	" Solution	1
	Alcohol, Absolute	6
	Alum	2
	Aluminium Hydroxide Mixture ...	6
	Ammonium chloride	1
	Antimony, Tincture of	1
	A.P.C. Tablets	4
	Arsenical Solution	1
	Ascorbic Acid Tablets	1

TABLE II—continued.

Authority Submitting.	Nature of Sample.	Number of Samples.
<i>Government Stores Dept—cont. ...</i>	Barium Sulphate	57
	Beef Extract	1
	Belladonna, Tincture of	1
	Borax Crystals.....	1
	B.S.M. Powder	1
	Buchu, Concentrated Solution of...	1
	Caffeine Citrate	2
	Calcium Gluconate	1
	Calcium Lactate	1
	Camphor Liniment	4
	Carbolic Acid	3
	Cascara Sagrada, Liquid Extract of	3
	Chalk, Prepared	2
	.. Precipitated	1
	Chloral Hydrate	2
	Chloroform	9
	Cleaning Powder	2
	Codeine Phosphate Tablets	3
	Collargon Ointment	1
	Copper Sulphate	1
	Diachylon Ointment	2
	Digitalis, Concentrated Tincture of	1
	Disinfectants	29
	Ephedrine Hydrochloride	1
	Ether, Anaesthetic	1
	Eucerin Ointment	2
	Fehlings Solution	2
	Ferrie and Ammonium Citrate ...	2
	Ferrous Phosphate, Compound	
	Syrup of	3
	Glycerine and Borax	5
	Glyceryltrinitrate	1
	Greases	20
	Guaiacum, Tincture of	4
	Hydrobromic Acid, Concentrated...	1
	Hydrochloric Acid	8
	Hyoseyamus, Concentrated Tinc-	
	ture of	1
	Hyoseine Hydrobromide Tablets...	1
	Ink	4
	Ink Powder	8
	Insecticides	4
	Iodine	18
	Ipecacuanha, Tincture of	6
	Isotonic solution of 5-aminoacridine	
	hydrochloride 1-1000	2
	Liquorice Powder	1
	Liquorice, Liquid Extract of.....	1
	Lubricants	52
	Magnesia, Milk of	1
	Magnesium Carbonate	5
	Magnesium Trisilicate	3
	Malt Extract	1
	Mandls Pigment	3
	Methanol	2
	Milk Sugar	2
	Morphine Hydrochloride	2
	Motor Spirit	1
	Nut Oil	2
	Nux Vomica, Tincture of	6
	Nux Vomica, Liquid Extract of ...	4
	Opium, Concentrated Camphorated	
	Tincture of	2
	Opium, Tincture of	1
	Paint	2
	Paraffin, Soft White	2
	Paraffin, Soft Yellow	1
	Paraldehyde	4
	Paste, Adhesive	2
	Petroleum Jelly, White	1
	Phenacetin	2
	Phenobarbitone	3
	Phosphoric Acid, Dilute.....	1
	Plaster of Paris	2
	Polish, floor	1
	Potassium Bicarbonate	2
	Potassium Bichromate	1
	Potassium Bromide	20
	Potassium Carbonate	1
	Potassium Citrate	2
	Potassium Hydroxide.....	7
	Quinine, Ergot and Strychnine	
	Tablets.....	1
	Quinine Sulphate	3
	Quinine and Urethane Ampoules...	1
	Rhubarb, powdered	3
	Salicylic Acid	1
	Silver Nitrate	4
	Simplex Syrup	1
	Soda, Washing.....	1
	Soda Ash	2
	Sodium Benzoate	1
	Sodium Bicarbonate	2
	Sodium Carbonate	3
	Sodium Citrate	1
	Sodium Nitrate	1
	Sodium Sulphate	1

TABLE I.—continued.

Authority Submitting	Nature of Sample	Number of Samples.
<i>Government Stores Dept—cont. ...</i>	Sodium Sulphite	2
	Squill, Concentrated Tincture of ..	2
	Stramonium, Tincture of	1
	Strychnine Hydrochloride	1
	Sulphaguanidine Tablets	1
	Sulphanilamide Tablets	2
	Sulphuric Acid, Dilute	3
	Thyroid Tablets	2
	Titanium Zinc in Oil	1
	Turpentine	1
	Urea	1
	Vitamin B1 Tablets	1
	Water, Distilled	1
	Water, Distilled, Ampoules	1
	Xylene	1
	Zinc Oxide	2
	Zinc Sulphate	1
<i>Police Department</i>	Criminal Investigations	517
	Animal Viscera	7
<i>Municipal and Departmental Authorities.</i>	Human Viscera, Blood, etc.	198
	Water	454
<i>Industrial Hygiene Authorities ...</i>	Sewage, Wastes, etc.	171
	Air	149
<i>Miscellaneous Authorities</i>	Battery Connections	1
	Clay	2
	Dust	56
	Dust Masks	2
	Goat skins	1
	Hair, Human	4
	Liquid	1
	Lungs, Human	23
	Nails, Human	3
	Oil	1
	Paste, Adhesive	1
	Soap	9
	Solvent	1
	Toys	2
	Urine	97
	Water	8
	Wool	1
	Aconite Pills	1
	Alum	1
	Beef Extract	1
	Bread	3
	Cornflakes	1
	Cathartix IX Pills	1
	Celery	1
	Chronic Acid	1
	Cleaning Fluid	2
	Coffee	1
	Confectionery	1
	Deposit from pans	1
	Disinfectants	3
	Dust	6
	Flock	31
	Fuel Oil	1
	Ghee and Thimmers	3
	Grapes	6
	Hair, Human	1
	Honey	1
	Jam	1
	Lubricants	42
	Meat	1
	Metal	1
	Milk, Human	6
	Molasses	1
	Nails, Human	1
	Oil, Baby	1
	Olive Oil	53
	Orange Fruit Juice Cordial	1
	Pills, Medicinal	3
	Pineapple Cordial	1
	Powder, Medicinal	1
	Sanitary Chemical	1
	Soap	1
	Soot	1
	Stomach Contents	1
	Strawberry Cordial	1
	Sulphadiazine Tablets	1
	Swab from throat of cow	1
	Tapioca	11
	Tea	2
	Tobacco	1
	Urine	12
	Vegetable Spread	1
	Vermicides	6
	Viscera, Animal	4
	Water	3
	Object found in drinking water ...	1
<i>Department of the Army</i>	Bread	2
	Ghee	1
<i>Department of the Air Force.....</i>	Insecticides	39
	Soap	4
<i>Royal Edward Victualling Yard ...</i>	Soap, Liquid Ammoniacal	1
	Soda Water	6
	Motor Spirit	1
	Mustard	1
	Sacramental Wine	3
	Total.....	2,824

PURE FOOD ACT, 1908-44.

Report of the Acting Chief Inspector on the General Administration of the Pure Food Act, 1908-44, for the year ending 31st December, 1947.

Staff.

- Chief Inspector, J. C. Williams.
- One Senior Inspector.
- Twelve Inspectors.
- One Assistant.
- One Attendant.

The executive work under the Pure Food Act includes the supervision of all places where food or drugs are prepared, stored or exposed for sale. Particular attention is given to the supervision of the milk supply; to the manufacture of jams, preserving of fruit and vegetables; condiments, smallgoods and cordials; and to the general condition of grocery, fruit, vegetable, meat, and fish shops, both wholesale and retail.

Milk Supply.—In connection with the supervision exercised over the milk supply, 5,985 samples were procured by Departmental Officers and submitted for analysis to the Government Analyst. Prosecutions successfully undertaken against traders who were supplying the public with adulterated milk numbered 166, and the fines and costs recovered in connection therewith totalled £628 8s.

Cream.—The ninety-three samples collected for analysis were found to be in accordance with the standard.

Bread Supply.—The quality of bread supplied was thoroughly investigated; 287 samples were submitted for analysis. Fifty-two samples were below the standard, nineteen of which warranted prosecution, fines and costs totalling £33 2s. The delivery of bread received special attention, fines and costs amounting to £30 12s. being imposed on nine carters for exposing food to contamination.

Cordials and Soft Drinks.—One hundred and fourteen samples were taken for analysis and all complied with the standard.

Ice Cream.—The twenty-seven samples submitted for analysis were found to be in accordance with the standard.

Jam.—Thirty samples of various kinds of jam all complied with the Regulation.

Meat.—Five thousand three hundred and forty-one samples of meat including tripe were collected for analysis from shops and factories, and as a result forty-nine warnings were issued and 221 prosecutions were launched. The most common adulterations were the presence of prohibited preservative or an excess of permitted preservative. Fines and costs amounted to £719 8s. Six traders were fined a total of £82 8s. for defrauding the public, by selling a mixture of pork and veal as pork.

Other Food and Drugs.—Many samples of food and drugs other than those specifically mentioned were collected and submitted for analysis, and action taken where necessary in respect thereof.

Premises Used for the Preparation, Sale and Storage of Food.—Inspections were made of 13,174 premises used for or in connection with the preparation, sale or storage of food. Prosecutions undertaken for unclean premises, etc., numbered twenty-one; the fines and costs imposed totalled £182.

Seizure and Condemnation of Unsound Food.—During the year regular supervision was exercised over food products in wholesale and retail stores, auction rooms and elsewhere. Over 390 tons of foodstuffs and 21,095 packages of assorted foods were found to be in so damaged or deteriorated a condition as to be unfit for human consumption, and were seized and destroyed. Also 184 gallons of fruit juice and 277 bottles of cordials were seized and subsequently destroyed.

Poultry.—The arrangement with the selling agents at the municipal markets for the examination of poultry, resulted in the condemnation of 7,598 head of poultry during the year. These birds were found to be unsuitable for human food, but probably many would have found their way through certain food channels had action not been taken.

General Breaches of the Pure Food Act and Regulations.—Legal proceedings instituted by officers of the Branch included 56 prosecutions for general breaches, among these were: 8 charges for the use of dirty receptacles, 1 for allowing an animal in a food store, 4 for failing to keep the premises free from either cockroaches, flies, rats or insects, 14 for smoking whilst handling food for sale, 2 for using chipped glasses, 5 for selling bottled oysters unlabelled, 2 for using absorbent material in a sausage machine, 1 for using a rag to stop the lid of a milk can, and one for obstructing an officer in his duties. The fines and costs imposed for the 56 breaches amounted to £291.

Survey of Sanitizing of Eating and Drinking Utensils.—The first phase of the survey in regard to the bacteriological condition of eating and drinking utensils, under the existing cleansing methods, has been made. An endeavour has

been made to obtain a representative collection from all types of establishments. In all 153 establishments have been visited, comprising 84 restaurants, 30 milk bars and 39 hotels, the two latter in regard to glasses used. Swabs have been taken from sets of four utensils each commonly used in the various establishments, as in each case from utensils stated to be ready for use for the dispensing of food. In all 540 swabs have been taken. The survey is still in progress.

Attached is a summary of the number of samples taken during the year, foodstuffs seized and destroyed, inspections made, number of prosecutions launched, and amount of fines and costs imposed.

TABLE I.—Summary of Work Performed by Pure Food Officers during the year ended 31st December, 1947.

Samples of Milk.	Samples taken by Departmental Officers.	Samples taken by Municipal and Shire Council Inspectors.	Total.
Number of samples taken from all parts of the State.	5,985	3,009	8,994
Number of samples below standard	202	75	277
Number of warnings	36	9	45
Number of prosecutions	166	66	232
Amount of fines and costs	£ s. d. 628 8 0	£ s. d. 214 0 0	£ s. d. 842 8 0
<i>Foods and Drugs other than Milk.</i>			<i>Total.</i>
Number of samples taken from all parts of the State ...			6,179
Number of prosecutions			260
Amount of fines and costs			£ s. d. 830 4 0
<i>Food Unfit for Consumption Seized and Destroyed.</i> —The seizures comprised over 390 tons and 21,095 tins, bottles and packages of assorted foodstuffs; 7,598 head of poultry were destroyed, also 904 boxes of fish and 184 gallons of fruit juice.			
<i>Inspection of premises used for the preparation, sale and storage of food—</i>			
Number of premises inspected in all parts of the State...			12,056
Number of prosecutions			21
Amount of fines and costs			£ s. d. 182 0 0
<i>General Breaches of the Act and Regulations—</i>			
Number of prosecutions			56
Amount of fines and costs			£ s. d. 291 0 0

TABLE II.—Summary of legal proceedings by Officers of the Pure Food Branch during the year ended 31st December, 1947.

	Prosecutions.	Fines and Costs.
		£ s. d.
Adulterated milk.....	166	628 0 0
Adulterated food and drugs	260	830 0 0
Unclean premises	21	182 0 0
General breaches	56	291 0 0
	503	1,931 0 0

TABLE III.—Summary of work carried out by Pure Food Officers under the Pure Food Act, 1908-1944, from the date of its operation, October, 1909 to 31st December, 1947.

	Prosecutions.	Fines and Costs.
		£ s. d.
Number of premises inspected (341,211).	2,672	13,960 4 0
General breaches of the Act	2,244	7,215 16 0
Milk samples (319,681)	6,315	26,431 0 0
Food and drug samples (145,504)...	7,424	21,611 1 0
Food and drug seizures	427	1,828 17 0
Grand Totals	19,082	71,046 18 0

FOOD AND DRUG SAMPLES.—Particulars of samples of food (other than milk) and drugs taken for analysis by Departmental Officers during 1947.

Sample.	No. of Samples.	Warnings.	Prosecutions.	Fines and Costs.
				£ s. d.
Beer	56	...	...	...
Butter	8	...	3	11 6 0
Bread	287	33	19	33 2 0
Cream	93	...	...	...
Coffee and Chicory	2	...	...	...
Confectionery	8	...	...	...
Condiments	19	3	2	3 8 0
Cordials	114	2	8	17 14 0
Dripping	1	...	...	...
Drugs	10	...	...	...
Essences	6	...	...	...
Fruit preserved	2	...	...	...
Fish	10	...	...	...
Flour	4	...	...	...
General	20	...	1	3 8 0
Ginger	4	...	...	...
Honey	5	...	...	...
Ice Cream	27	...	...	...
Icing Mixture	4	...	...	...
Jam	30	...	...	...
Milk, condensed	2	...	...	...
Meal	4	...	...	...
Meat (including tripe)	5,341	49	221	719 8 0
Pepper	15	...	...	...
Spirits, wine	29	...	...	...
Soap	51	8	6	41 18 0
Sugar	2	...	...	...
Tea	9	...	...	...
Vinegar	2	...	...	...
Vegetables	11	...	...	...
Water	3	...	...	...
Totals	6,179	95	260	830 4 0

SEIZURES.—Particulars of Food seized as unfit for human consumption, and destroyed by Officers under the Pure Food Act during the period January 1st to December 31st, 1947.

Article.	Tins.	Packets.	Bottles.	Tons.	Cwts.	Qrts.
Assorted foods	545	360	1,111	13	5	3
Biscuits	...	...	...	1	10	3
Condiments	...	...	816	...	...	...
Confectionery	...	...	...	14	19	3
Cheese	...	60	...	4	...	...
Cordials	...	...	277	...	...	...
Cocoa	...	...	...	...	...	1
Fruits, dried	...	269	...	201	15	...
Fruit, preserved	...	...	71	...	...	...
Fruit juice	184 gallons.	...	...	...	...	...
Fish	...	904 boxes.	...	6	3	...
Flour	...	...	...	85	6	3
Jam	10,440	...	...	...	...	...
Meat, canned	...	...	...	26	18	1
Nuts	...	179	...	8	6	1
Oatmeal	...	40	...	...	...	...
Poultry	7,598 head.	...	...	...	...	...
Sugar	...	5 bags.	...	...	...	...
Tomato pulp	5,320	...	...	28	2	1
Salt	...	...	...	...	1	...
Soups	...	598	...	...	...	...

A total of 390 tons 9 cwts. of assorted food and drugs; 21,095 tins, bottles and packets of the same and 7,598 head of poultry.

INSPECTIONS.—Inspections in Country Districts during 1947 by Officers of the Pure Food Branch.

District.	No. of Inspections.
Albury	32
Apsley	1
Armidale	6
Ashford	2
Bathurst	52
Berrigan	9
Bega	2
Blue Mountains	12
Bulli	2
Broken Hill	11
Bland	18
Casino	23
Cessnock	22
Coonamble	6
Cooma	3
Cootamundra	6

INSPECTIONS—continued.

District.	No. of Inspections.
Cowra	9
Deniliquin	9
Dorrigo	7
Erina	13
Eurobodalla	6
Forbes	22
Glen Innes	1
Gloucester	14
Gosford	29
Goulburn	3
Grafton	57
Grenfell	14
Gundagai	2
Gunnedah	2
Hastings	30
Inverell	14
Illawarra Central	3
Junee	1
Katoomba	21
Kempsey	24
Kyogle	20
Lithgow	5
Lismore	22
Macleay	1
Moree	3
Macleay	18
Maitland	45
Muswellbrook	29
Namoi	17
Murwillumbah	3
Nambucca	5
Narrabri	18
Narranderra	30
Narromine	3
Newcastle	114
Nyngan	3
Orange	2
Parkes	10
Penrith	27
Peak Hill	3
Port Macquarie	13
Quirindi	2
Scone	7
Tamworth	38
Taree	11
Tomerong	3
Tarro	1
Tumut	10
Ulmurra	6
Warren	13
Wellington	12
Wingham	22
Wyang	37
Wollongong	3
Yass	21
Yallaroi	10
Young	23

Total Inspections, Country..... 1,118
Metropolitan 12,056

Grand Total, Inspections 13,174

Prosecution for dirty premises 21
Amount of fines and costs £ s. d.
182 0 0

GENERAL BREACHES OF PURE FOOD ACT AND REGULATIONS.—Particulars of Prosecutions.

Offence.	No.	Amount of Fines and Costs.
		£ s. d.
Dirty receptacles, refrigerators, etc.	8	49 4 0
Premises not kept free from cockroaches ..	1	10 8 0
" " " " flies	1	3 18 0
" " " " rats	1	8 8 0
" " " " moths	1	6 8 0
Animals allowed in food store	1	3 8 0
Smoking on food premises or during the handling of food for sale.	14	43 12 0
Exposed food	9	30 12 0
Chipped crockery, glasses, etc.	2	4 8 0
Unlabelled oysters	5	14 0 0
Sale of veal and pork as pork	6	82 8 0
Wrapping food in newspaper	3	11 14 0
Using absorbent material in sausage machine ..	2	14 16 0
Using rag to stop lid of milk can	1	2 8 0
Obstructing an officer in his duties	1	5 8 0
Total	56	91 0 0

ANNUAL REPORT OF THE ACTIVITIES OF THE SANITATION BRANCH.

During the Year ended 31st December, 1947.
Staff.

Chief Inspector, G. A. Garrow, M.R. San. I., T.P. Cert.; Senior Inspector, Mr. S. L. Parsons; seven Certificated Inspectors, two Licensed Surveyors and one Junior Clerk.

Vacancies.

The aforementioned seven Certificated Inspectors do not include the three vacancies created by the appointment of Messrs. Inspector Horne, Way and Turner, as Senior Inspectors respectively, to Medical Officer of Health, South Coast District, Mitchell District and Richmond-Tweed District.

It is expected those vacancies will be filled during 1948.

Country and Metropolitan Districts, Routine and General Inspections, etc.

Towns: Primary and Re-Inspections were eleven.

Insanitary Buildings: One hundred and sixty buildings were inspected and the respective local authorities were requested to cause necessary repairs or alterations to be carried out.

Shortage of housing accommodation made it inadvisable to recommend the issue of closing orders in other than extreme cases, consequently only two closing order certificates were recommended.

Guest and Boarding Houses: Twenty-four were inspected and suitable action recommended where found necessary.

Shop Premises: Two hundred and sixty-two shops were inspected and appropriate action taken.

Hospitals, Institutions and Schools: Twenty-five separate premises were inspected and necessary action recommended.

Public Halls and Theatres: Thirty inspections were made and twenty air tests were carried out in conjunction with an Officer from the Division of Industrial Hygiene.

Hotel Premises: Thirty-eight hotels were inspected and reports and recommendations thereon were forwarded to the controlling authority for necessary action.

Swimming Pools: Fourteen inspections of pools, treatment plant and proposed sites were made and reports furnished thereon.

Cattle Slaughtering and Diseased Animals and Meat Act, 1902: During the year the control of Slaughtering Premises under the aforesaid Act was transferred to the Department of Agriculture since when, Officers of this Branch have assisted and advised Officers of that Department during investigations and in matters under the Act and Regulations thereunder.

During 1947, prior to aforesaid transfer, thirty-seven inspections were made of slaughtering premises, including abattoirs, and where deemed necessary, suitable action was taken or recommended and local authority requested to give effect thereto.

Three proposed sites for country abattoirs were inspected in company with other members of the Country Abattoir Sites Committee.

Increased Fees: One council made application under section 15 of the Act for increase of fees, on investigation of which the application was recommended and action duly taken.

Noxious Trades: Five hundred and sixty inspections and re-inspections of Noxious Trades Premises were made and where found necessary, repairs, etc., were required to be carried out.

In a few instances legal proceedings were instituted against the trader.

The provisions of the Act were extended to Rylstone Shire, Warren and Wentworth Municipalities.

Removal of Dead Stock from Flemington: 13,827 dead animals were removed from the Flemington Sale and Trucking Yards and the Abattoirs by a private firm to its knackery premises, and in no case were complaints received in this office respecting these activities.

Flock and Bedding Materials: Twenty-eight samples of flock and bedding material were obtained and one mattress purchased for examination.

Sixty-eight inspections of premises were made and suitable action taken where found necessary.

Camps, Showgrounds, Cemeteries, etc.: Thirty inspections were made and where found necessary, suitable action was recommended.

Sale Yards and Proposed Sites: Five inspections were made of sale yards and suitable action recommended. One site was inspected and found suitable.

Scavenging Districts, Sanitary Depots, Proposed Sites and Garbage Incinerators: Twelve descriptions and plans of proposed scavenging districts were examined, several of which were amended or recast in this office.

Two hundred and fifty-two inspections of Sanitary Depots and Garbage Incinerators were made and where found necessary suitable action was taken.

Thirty-six proposed depot sites were inspected and those found unsuitable were not recommended.

One application for permission to dispose of nightsoil pan contents in furrows was investigated and duly granted.

Sanitary Services: Sixteen investigations of sanitary services were made and where found warranted suitable action was taken.

One Sanitary Service was recommended and in due course was installed.

Septic Tanks, Sewerage Treatment Works, Public and Private Water Supplies: 1,209 plans of proposed septic tanks were examined and where found necessary were either amended or not recommended for approval; of the nine hundred and ninety sites inspected a number were found unsuitable, in consequence of which, approval to instal the septic tank could not be recommended.

One hundred and four inspections of existing septic tanks, including sewerage treatment works and effluent disposal areas, were made and suitable action recommended where found necessary.

Five investigations were made respecting the source, and storage of water supplies, and water samples were procured for examination and suitable action recommended where found necessary.

Number of Councils Required to Employ a Certificated Health Inspector: Two Local Government Councils were required to employ a Certificated Health Inspector following an investigation of their respective areas. Both Councils complied.

Unhealthy Building Land: Seven hundred and nineteen inspections and check surveys were made of land considered unfit for building purposes.

About 13,900 enquiries were made by solicitors and others; of that number 13,709 were revenue producing to the extent of £1,713 12s. 6d.

Certain lands at Parramatta, and in Blacktown Shire were notified as unfit for building purposes, by notice in the *Government Gazette*.

Certain lands at Burrell Lake, Clyde Shire, were satisfactorily improved by filling and draining, in consequence of which the notice published in the *Government Gazette* was revoked.

Surveys are being effected, and plans, specifications and notices are being prepared of several areas of land in various parts of the State and which are considered unfit for building purposes.

Owing to the enormous increase of survey work and the preparation of plans, etc., connected therewith, a number of applications from Local Councils, respecting land situated in their respective areas, cannot yet be attended to.

Infectious Diseases: Seven investigations were made and suitable action taken; one case of typhus was investigated and action considered necessary recommended.

Rat Infestation.—1,767 rats were examined in the Microbiological Laboratory and were found free from Plague; five hundred and ninety-nine of that number and sixteen mice were trapped by this Department's rat catchers.

One hundred and one investigations were made respecting alleged rat infestation and where found necessary suitable action was taken.

Sydney Wharves.—Two hundred and sixty visits were made to these premises, and the controlling authorities notified where repairs, eradication of rats, etc., were considered necessary.

Re-inspections of the premises disclosed that the work required has been or is being carried out.

Nuisances.—Investigations were made of two hundred and seventy-four complaints respecting drain, pollution of water courses and other alleged nuisances, following which, action considered necessary was recommended.

Sorting of Dead Wool.—Four visits were made to premises on which this process is carried on, and where considered necessary, advice was given.

Dairies Supervision Act.—During the year one shire Council made application to be proclaimed the Local Authority under the Act. The necessary investigation was made and resulted in the application being refused.

Seventy-six Dairy and Milk-Vendor's premises were inspected.

Samples of Water, Sewerage, Effluents, Soils, Dust, Sawdust and Air.—One hundred and four samples were collected for chemical and bacteriological examination on results of which suitable action was recommended.

Knackers Premises and Horse Flesh Shops.—Forty-eight inspections were made and where found necessary suitable action was recommended.

Legal Proceedings.—In connection with the several prosecutions instituted for breaches of the various Acts, Regulations and Ordinances, fines and costs amounting to £79 5s. 0d. were imposed.

Amendments to Acts, Regulations and Ordinances.—Several proposed amendments of the Local Government Ordinances were submitted to and approved by the Board of Health under section 26B of the Public Health Act 1902-1944.

Amendments of the Regulations under the Public Health Act 1902-1944 and the Noxious Trades Act 1902-1944 are under consideration.

Applications for Cyanide Fumigation Operators License.—During the year one person presented himself for the respective examinations and was recommended.

Exhumations.—By an arrangement with the U.S.A. Authorities the exhumation of 467 bodies of American Servicemen and women was supervised by Officers of this Branch.

The caskets containing the bodies were ultimately forwarded to Queensland for further preparation prior to being shipped to America.

Committees.—An Officer of this Branch represents the Department on the following Committees:—

Building Regulation's Advisory Committee.

Cyanide Examination Committee.

Country Abattoirs Sites Committee.

{ Commonwealth Reconstruction Training Scheme.
Health Inspectors' Industrial Committee.

**PRIVATE HOSPITALS ACT, 1908. REPORT ON THE OPERATION OF THE ACT FOR THE YEAR ENDING
31st DECEMBER, 1947, BY A. J. HOPE, M.B., Ch.M.**

At the end of the year there were 310 licensed hospitals in New South Wales, having a bed capacity of 3,774. In comparison with the figures for the previous year, this meant a reduction of hospitals by 38, and of beds by 252, i.e., 10.9 per cent. and 6.67 per cent., respectively.

Of the 310 hospitals, 141 were in the metropolitan area, and 169 in country districts; the decrease being respectively 3 and 35. The bed-carrying capacity, however, increased in the metropolitan area by 26, but decreased in the country districts by 278.

Of these hospitals 198 were licensed to receive patients, varying from 1 to 10, and 112 for more than 10. Only 39 of the latter were able to receive more than 20 patients at any one time. Of the 310 hospitals, 94 were licensed for the reception of lying-in cases only, 62 for medical and surgical patients only and 154 for medical, surgical and lying-in cases.

Of the three types of hospital, that which catered for medical and surgical patients only showed an increase (7) or 3.63 per cent.; the other two showed a loss, that which admitted lying-in cases only 26 or 21.6 per cent., and that which admitted medical, surgical and lying-in 19 or 10.8 per cent.

Inspection of Private Hospitals.—All private hospitals were regularly inspected during the year, and many requests for improvements were sent out. In most cases these requests referred to maintenance, which had been neglected or had been impossible to implement owing to the exigencies of war, and difficulty of procuring labour and material. There is still much leeway to be overcome in this direction.

Most of the licensees, however, are desirous and anxious to co-operate with the Department, and welcome the visits and advice of the Supervisory Nurses, and in this way the standard of private hospitals has been maintained.

Prosecutions.—There were no prosecutions during the year, but in a very few cases, strong warnings were issued.

Overcrowding and accommodating in the wards more patients than the licence allows, are still two very common offences.

Puerperal Cases.—Two cases occurred in private hospitals during the year.

Rest and Convalescent Homes.—These establishments were also regularly inspected during the year, although there is no enabling legislation concerning them. Very many complaints have been received, during the year, about some of them and investigation has frequently substantiated these complaints.

Some of these homes are very bad and disagreeable, in which overcrowding and poor attention are marked features; in some also the food is poor and inadequate.

There are others, on the other hand, which are excellently managed and where conditions are first-class.

TABLE III.—Showing general decline in numbers of the different types of Private Hospitals in the five-year period 31st December, 1942 to 31st December, 1947.

Year.	Total Hos- pitals.	Total Beds.	Medical Surgical and Lying-in.	Medical and Surgical.	Lying-in.	One bed.	Two beds.	Three beds.	4-5 beds.	6-10 beds.	11-20 beds.	Over 20.
1942	462	4,854	198	52	212	25	33	46	78	139	99	42
1947	310	3,774	154	62	94	13	20	22	44	99	73	39
Decrease	152	1,080	44	...	118	12	13	24	34	40	26	3
Increase	...	...	...	10	...	...	...	...	...	...	...	...
Percentage, Decrease ...	32.9	22.2	22.2	...	55.66	48	39.3	52	43.5	28.7	26	7.1
Increase ...	...	...	...	19.2	...	...	...	...	...	...	...	...

It can be seen that during this five-year period Private Hospitals in general decreased by 152 or 32.9 per cent. the loss particularly affecting those which admitted lying-in cases only (being 55.6 per cent.). Hospitals admitting medical and surgical cases only, on the other hand, showed an increase of 10 or 19.2 per cent. Those hospitals whose bed capacity ranged from 1 to 5 decreased by 83 or 45.3 per cent., and those with bed capacity of from 6 to over 20 decrease by 69 or 24.6 per cent.

Bush Nursing Association and Country Women's Association.—These bodies still perform excellent work by maintaining small hospitals in out-of-the-way country areas in spite of many difficulties, the main one appearing to be that of obtaining suitable managers, who are prepared to stay. In several cases, for this reason, temporary closure has been necessary.

Assistance Rendered by Other Departments.—Thanks are extended to the Police Department and the Registrar of the Nurses' Registration Board, and respective staffs for their ready assistance in all matters appertaining to Private Hospitals.

TABLE I.—Showing classification of Private Hospitals licensed at 31st December, 1947, according to nature of cases received and the total number of beds provided in each category.

	Medical, Surgical and Lying-in.		Medical and Surgical.		Lying-in.		Total.	
	Number of Hospitals.	Number of Beds.	Number of Hospitals.	Number of Beds.	Number of Hospitals.	Number of Beds.	Number of Hospitals.	Number of Beds.
Sydney Metropolitan area.	59	1,385	47	924	35	211	141	2,520
Country Districts ...	95	807	15	152	59	295	169	1,254
Total	154	2,192	62	1,076	94	506	310	3,774

It is seen that those hospitals which admit medical, surgical and lying-in cases constitute the greatest proportion of those licensed, followed by those that admit lying-in cases only. The proportion is 49.67 per cent., 20 per cent. and 30.32 per cent. respectively. The bed capacity, however, showed that those hospitals which admitted medical, surgical and lying-in cases constituted the greatest proportion followed by those that admitted medical and surgical cases only; the proportions being 58.08 per cent., 28.5 per cent. and 13.37 per cent.

TABLE II.—Showing classification of Private Hospitals with respect to size, as signified by the number of beds available, licensed at 31st December, 1947.

Beds.	1.	2.	3.	4-5.	6-10.	11-20	Over 20.	Total.
Sydney Metropolitan area	2	5	7	11	41	41	34	141
Country Districts	11	15	15	33	58	32	5	169
Total	13	20	22	44	99	73	39	310

The number of 6-20 and over bed hospitals still constitutes the greater proportion, being 68 per cent. compared with 66 per cent. last year.

MEDICO-LEGAL SECTION AND HOSPITAL ADMISSION DEPOT. REPORT OF THE GOVERNMENT MEDICAL OFFICER FOR SYDNEY FOR THE YEAR ENDED 31st DECEMBER, 1947.

Medical Staff.

Dr. C. E. Percy, Government Medical Officer for Sydney.
 Dr. C. W. England, Medical Officer.
 Dr. F. W. Fraser, Medical Officer.
 Dr. S. H. Hankins, Medical Officer.

Hospital Admission Depot.

Assistants, 3; Night Officer, 1.

Medical Work.

Admissions to Hospitals and Homes.—Three thousand three hundred and twenty-five persons were admitted through the Depot to Metropolitan Hospitals, 5,968 to State Hospitals and Homes, and 1,022 to Convalescent Homes. Admissions of country residents to Metropolitan and Base Hospitals were also arranged. Ambulance removals arranged by the Depot totalled 9,459.

Medical Examinations for State Government Departments.—One thousand seven hundred and ninety-one were performed, some persons being visited in their own homes.

Medical Examinations of Police Recruits.—One thousand five hundred and thirty-one recruits (probationary constables and police cadets) were examined, 442 probationary constables were examined after twelve months' service and 143 police cadets were given periodical examinations during the year.

Medical Examination of Sick Police.—Matters concerning the health of the Police Force are dealt with. The average daily number of police on sick report was ninety-three.

Medico-Legal Work.

Examinations of Alleged Rape and Criminal Assault Cases.—Ninety-nine examinations were made, exhibits connected with such cases were examined, and evidence was given at various courts.

Work for the Coroner's Court.—The Government Medical Officer performed post-mortem examinations at the City Morgue in connection with suicides, homicides, violent and uncertified deaths.

Lunacy Work.—The Reception House at Darlinghurst is visited daily—1,203 cases were certified as insane.

Vaccinations Against Small Pox.—Three hundred and sixty-two vaccinations were performed for the Police Force and the general public.

HEALTH EDUCATION AND PROPAGANDA.—REPORT BY THE PUBLICITY OFFICER FOR 1947.

Introductory.

The amount of £32,000 provided for health education of the public in 1946-47 was severely curtailed, the amount voted for 1947-48 being reduced to £10,000.

As a result, the extensive programme of health education by means of press advertising, broadcasting, posters, pamphlets, films, window displays, exhibitions, etc., has had to be curtailed, and all press advertising ceased in June, 1947.

However, during the first half of 1947 we were able to continue the ambitious programme outlined last year and the results were most gratifying. Actual results of a Health Education campaign are difficult to assess, but to one series of press advertisements over a period of four months, we had 21,000 written applications for literature and information, and more than an equal number of callers—or nearly 50,000 people in all who sought information.

Fortunately the large stocks of pamphlets and posters obtained and ordered prior to the curtailment of the Vote have stood us in good stead, enabling us to continue temporarily distribution at a satisfactory level.

In spite of the reduction in expenditure, the Department continues to find it advantageous to employ an Advertising Agency and a firm of Display Contractors to assist in our educational campaigns.

Publications Issued in 1947.

- 20,000 reprints of an eight-page health newspaper entitled "Fitness".
- 10,000 new 4-paged folders on "Noise" abatement.
- 50,000 new 4-paged, 4-colour folders to announce nutrition talks.
- 10,000 new 8-paged, 2-colour booklets on "Goitre".
- 50,000 reprints of a 56-paged illustrated booklet "Healthy Motherhood".
- 25,000 revised 18-paged, illustrated, 2-colour booklet "Common Household Pests".
- 25,000 new 24-paged, 3-colour, illustrated booklet "Things You Should Know".
- 50,000 copies of two revised editions of the mothercraft book "Our Babies".

Posters Issued in 1947.

- 7,500 new diphtheria immunization posters "Do You Want Your Child to Suffer", size 20 in. x 30 in.
- 5,000 reprints of "Things You Should Know", size 30 in. x 40 in.
- 200 24-sheet posters entitled "Use Your Handkerchief".
- 5,000 reprints of "Safe Milk For Your Child", size 20 in. x 30 in.
- 200 new 24-sheet posters on "Noise Abatement".
- 5,000 new rat control posters entitled "Stop The Rat Invasion", size 15 in. x 20 in.

Window Displays.

Nearly all the Department's full-size window displays were reconditioned and improved by colouring the photographic sections. A very valuable collection of window and other

display material has now been accumulated, of which the best possible use is being made. Window displays are installed by our contractors usually for periods of one month. These displays deal with Tuberculosis, Nutrition, Venereal Disease, Baby Welfare, Infectious Diseases, Sanitation, Control of Disease-spreading Pests, and many other subjects.

During the year no less than 547 window displays were arranged comprising 102 large displays and 445 small.

An innovation this year was an appeal to Local Authorities to assist in securing free window space for Health Department displays during the 1947 Health Week campaign. This secured a good response from a number of councils, as the following figures will show:—

Large window displays	29
Small window displays	87
TOTAL	116

A successful series of displays were also staged at Newcastle as part of the Health Week campaign there in June, 1947, comprising:—

Large window displays	12
Small window displays	17
TOTAL	29

Health Week Matinee Screenings.

A special series of matinee screenings of 35mm. health films in theatres for school children was arranged as part of the Sydney and Newcastle Health Week campaign.

The co-operation of Local Authorities was also invited in arranging these screenings, and in Sydney 28 municipal and Shire councils arranged 49 such screenings at which the attendances totalled 42,608.

This necessitated the use of three separate programmes of films and involved hiring five films of suitable subjects and borrowing four others.

The balance (thirteen subjects) were from our own film library. The films were selected with the utmost care and it is gratifying that these screenings proved outstandingly successful, very appreciative letters having been received from several headmasters and many of the councils.

The average screening time was 1½ hours, and short introductory health talks were given by the Publicity Officer at these screenings.

"Fitness" Exhibit.

The "Fitness" display and V.D. Galleries exhibited in the Town Hall in November, 1946, as part of the Health Week Exhibition was subsequently transferred to the Wollongong Town Hall and shown there for several days with excellent results. Great interest was aroused and no less than 8,870 adults and 4,000 children visited the Town Hall to inspect the exhibit.

It was then transferred to the Royal Agricultural Show at Easter and was exhibited in two large Army marquees as space in a pavilion could not be obtained. This also proved a great success and a total of 160,000 people viewed the exhibits, many of whom passed through the V.D. Galleries.

It was then taken to Newcastle and exhibited at the 150th Anniversary Celebrations in the Schools Pavilion at the Show-ground for a period of eight days and proved one of the major attractions.

The exhibit was crowded most of the day—queues were in evidence at times during the afternoon and every evening. The total number who viewed the exhibit and passed through the Galleries was 100,000.

It was hoped to transfer this exhibit to railway carriages and exhibit it throughout the State, but the curtailment of the Vote already referred to has prevented the fulfilment of that ambition.

However, the exhibit has achieved a remarkable success as a means of health education, and it is hoped that provision of more adequate funds in the future will enable full use to be made of it before it is dismantled.

Broadcasting.

The only paid radio advertising used during the year were fifty-word scatters on diphtheria immunization. Regular weekly talks were broadcast by Baby Health Centre Sisters at Goulburn and Mudgee over the local stations. At various times talks were given by Departmental officers, particularly during Health Week.

Slides.

Five hundred and fifty slides on Sanitation for theatres were produced and sent to every picture theatre in the State for free exhibition by arrangement with the Motion Picture Exhibitors Association.

Press.

Paid advertisements were inserted regularly in city and country newspapers from January to June. As already stated, owing to the reduction in the Vote, it was not possible to continue these after June. However, press articles on topical health subjects are still being issued each week to all suburban and country newspapers.

Films.

During 1947 the Department was fortunate in securing twenty-seven new 16mm. films either by purchase or donation. The majority of these came from the United States, which source is now unavailable owing to dollar restrictions. The Department's 16mm. library now contains ninety-three different films with extra copies of several of them. As in previous years, screenings of the above films on the Department's own equipment were given throughout the year, the number of such screenings being seventy-one at which the attendances totalled 24,604.

With 35mm. films the Department embarked on its new policy of releasing approved films to all theatres in the State by agreement with the Motion Picture Industry. Two films were so released, "Defeat Diphtheria", produced by the British Ministry of Information, and "Clean Up The Underworld", a 400-foot film on rat control, produced by the Department.

C—NUTRITION. REPORT ON THE ACTIVITIES OF THE NUTRITION SECTION FOR THE YEAR ENDED 31ST DECEMBER, 1947.

Staff.

Dietitians	3
Shorthand-typiste	1

Activities Carried Out During the Year.

Dissemination of advice to the public on diet and nutrition by medium of newspaper articles, radio talks, country lecture tours, addresses to school children and to local bodies and organisations in both country and metropolitan areas and by personal interviews and correspondence.

Preparation of publicity material in conjunction with the publicity Branch.

Inspection of and reporting on catering establishments in State and Mental Hospitals and various denominational schools and colleges.

Fostering of school canteens by active co-operation with the School (Oslo) Lunch Advisory Committee, and by inspection of schools and addresses to interested groups.

A dietitian attended the exhibition at the Royal Easter Show. A dietitian also attended the exhibit at the Wollon-

gong Show in March, and the Newcastle Show from 5th to 13th September, 1947 for the purpose of giving advice on food values and any nutritional problems.

New Developments During the Year.

Inspection of Kindergartens and Nursery schools.

Wide extension of country lecture tours.

Preparation of material for weekly newspaper articles in various country papers.

Preparation of material for regular radio talks over various country radio stations.

Extension of nutrition lectures to school children so as to include those in the fifth and sixth classes in primary schools and all girls in country high schools. Also the approval of the Education Department permitting the dietitians to give a series of five lectures in nutrition to girls in second and fourth year classes in country high schools.

Preparation of new and revision of existing various Departmental publications and pamphlets on nutrition.

D—DIVISION OF MATERNAL AND BABY WELFARE.

PART 1.—MATERNAL WELFARE.

Pre-Natal Clinics.

The Departmental pre-natal clinics were first opened in 1929 to supplement those in operation in the Metropolitan Obstetric Hospitals. The marked increase in attendances indicates a growing appreciation of the importance of regular pre-natal supervision.

Seven pre-natal centres were conducted in 1947 instead of eight as in 1946, as Newtown was closed in October, 1946, being regarded as redundant on account of its proximity to King George V Memorial Hospital. The total attendance of mothers for 1947 (viz., 9,550) was therefore somewhat less than last year with 10,352, as against 3,234 for 1942.

There were decreases at Hurstville with a total of 2,710, which is 567 fewer than last year, and Rockdale with a total of 945, 230 fewer than last year. Campsie and Parramatta, however, have been much busier this year, showing increases of 234 and 270, respectively. In the last week of March, the days of attendance at the centres were changed, giving one whole day for its two sessions to Manly, and similarly one whole day for Hurstville. Hornsby was changed from an afternoon to a morning session.

During the year, haemoglobin estimations have been carried out at Hornsby, and blood was taken for Wassermann reaction at Parramatta for mothers who had not arranged for confinement at a public hospital. Very few tests were necessary at either of these centres. At Campsie haemoglobin tests were done and blood taken for Wassermann reaction from mothers without public hospital bookings, and on an average these tests were done on one mother a fortnight.

Scheme for the Reduction of Maternal Mortality

The Special Medical Committee investigating Maternal Mortality in the metropolitan area includes the Director-General of Public Health, the Emeritus Professor and the Professor of Obstetrics at the University of Sydney, the senior Honorary Medical Officers of each of the two student teaching hospitals, a General Practitioner appointed by the N.S.W. Branch of the British Medical Association and the Director of Maternal and Baby Welfare; the latter is the medical secretary of the Committee.

The co-operation of the Medical Superintendents of the Metropolitan Obstetric Hospitals and medical practitioners in private practice has been greatly appreciated by the Committee. Questionnaires, which set out to furnish a detailed and accurate case history are sent to the Public Obstetric hospitals shortly after the occurrence of each maternal death.

These questionnaires are also sent to the private practitioners and consultants concerned and thus a complete history of the case is obtained. In this way, the Committee endeavours to assess as accurately as possible the avoidable factors, if any, and the responsibility for same in each maternal death and thus achieve the object of reducing maternal mortality.

Consultant Service.

Since the scheme came into operation in 1939 the services of obstetric consultants who have agreed to receive a reduced fee from the Department, have been available for all patients who are unable to meet a specialist's fee.

The consultant service is, however, not frequently used because fewer mothers are confined in their own home, and those in the obstetric hospitals are provided with a specialist service when necessary.

Metropolitan Blood Transfusion Service.

The decrease in maternal deaths from haemorrhage is largely due to the mobile blood transfusion service as it is considered that each transfusion given at the bedside of a patient is potentially a life saved.

This service is available to any medical practitioner at any hour of the day or night. The original unit was stationed at the Women's Hospital, Crown Street. During 1945 other units were established at Royal Prince Alfred Hospital, North Shore Hospital and the Royal Hospital for Women, Paddington.

Physiotherapy in Pregnancy and the Puerperium.

Under the supervision of qualified physiotherapists pre-natal and post-natal exercises are a routine at the Royal Hospital for Women; and post-natal exercises are routine procedure at the Women's Hospital, Royal North Shore and King George V and Ryde District Hospital. Medical officers at the Departmental clinics have observed that the mother who has attended these hospitals has received considerable benefit from these exercises. The post-natal examinations reveal that the mothers who have had post-natal exercises less frequently develop gynaecological abnormalities such as retroversion, cystocele, rectocele, and the like. Moreover, their abdominal muscles usually regain their normal tone and their posture is resumed correctly.

At the Metropolitan Obstetric Hospitals where this procedure has been instituted, medical and nursing staff report that the mothers express their appreciation of the sense of well-being which the exercises produce, and of the regaining of their normal figure.

The N.S.W. Branch of the Australian Physiotherapy Association has introduced a sound routine of training in this subject at the Royal Hospital for Women under Miss Nancy Love with special lectures by Emeritus Professor Windeyer.

The Departmental film, "Physiotherapy in Pregnancy and the Puerperium", continues to be used for the teaching of medical and physiotherapy students and for the training of nurses. Copies are used for training physiotherapy students in other States.

Control of Puerperal Infection.

To protect mothers after the birth of their babies from cross infection, which might prove fatal, every effort is made by this Department to prevent the spread of puerperal sepsis. Control is effected by the administration of the Nurses' Registration Act which compels every nurse to notify any case of puerperal pyrexia occurring in her practice, which prohibits her from attending any other case while attending a patient with puerperal infection, and which examines her methods in

the management of her cases; also by the Public Health Act under which puerperal infection is a notifiable disease, and by the Private Hospitals' Act.

The Regulations of the various acts are designed to prevent the occurrence of puerperal sepsis, particularly those for nurses relating to the wearing of masks, the management of the case, etc. Each case of infection occurring is investigated by bacteriological examination. Further action is determined by those results, the dual object being to protect midwifery patients from further possibility of infection and to avoid any delay or difficulty in nursing and medical supervision.

During 1947, 85 cases were notified to the local authorities. Of these, 63 were due to abortion sepsis (60 in the metropolitan area and 3 in the country) and 22 following confinement (8 in the city and 14 in the country).

The distribution of these cases was:—

	Abortal Sepsis	Following confinement.
Private hospitals	—	2
Public hospitals	63	20

Under the Nurses' Registration Act, 81 cases of pyrexia were notified.

Vital Statistics.

The live birth rate for New South Wales for 1947 was 23.25 per 1,000 mean population. This is the highest rate since 1925. The number of live births was 69,398, and of still births 1,466, a total of 70,864. See Table I.

TABLE I.—Live Births and Still Births.

Year.	Total Births.	Live Births.	Live Births Rate per 1,000 of Population.	Still births.
1935.....	46,077	44,676	16.88	1,401
1936.....	47,612	46,193	17.31	1,419
1937.....	48,949	47,497	17.62	1,452
1938.....	48,792	47,319	17.38	1,473
1939.....	49,363	48,003	17.45	1,360
1940.....	50,724	49,382	17.77	1,342
1941.....	53,193	51,729	18.47	1,464
1942.....	54,058	52,647	18.59	1,411
1943.....	58,730	57,265	20.04	1,465
1944.....	61,123	59,612	20.65	1,511
1945.....	63,202	61,662	21.13	1,540
1946.....	68,794	67,247	22.83	1,547
1947.....	79,864	69,398	23.25	1,466
<i>Metropolitan Area (Statistical Metropolis).</i>				
1935.....	17,495	16,907	13.60	588 full
1936.....	18,341	17,759	14.23	582 year.
1937.....	18,748	18,158	14.48	590
1938.....	19,150	18,559	14.73	591
1939.....	19,885	19,223	15.24	562
1940.....	20,515	19,942	15.53	573
1941.....	23,019	22,366	17.06	653
1942.....	23,848	23,220	17.26	628
1943.....	27,700	26,989	19.52	711
1944.....	29,014	28,318	19.96	696
1945.....	30,230	29,501	20.42	729
1946.....	32,467	31,769	21.68	698
1947.....	32,536	31,918	21.51	618

The loss of mothers lives per 1,000 live births is expressed as a maternal mortality rate. The rate for New South Wales for 1947 was 1.87 including deaths from criminal abortion. Exclusive of such deaths the rate was 1.61 (See Table II).

TABLE II.—Maternal Mortality.

Metropolitan Area, Remainder of State and Whole State.

Year.	Live Births.		State.	Deaths from Puerperal Causes (excluding Criminal Abortion).			Maternal Mortality Rate per 1,000 live births (excluding Criminal Abortion).		
	Met.	Remainder.		Met.	Remainder.	State.	Met.	Remainder.	State.
1935	16,907	27,769	44,676	74	156	230	4.38	5.62	5.15
1936	17,759	28,434	46,193	103	133	236	5.80	4.68	5.11
1937	18,158	29,339	47,497	83	115	198	4.57	3.92	4.17
1938	18,559	28,760	47,319	72	109	181	3.88	3.79	3.82
1939	19,323	28,680	48,003	59	103	162	3.05	3.59	3.38
1940	19,942	29,440	49,382	59	116	175	2.96	3.94	3.54
1941	22,336	29,363	51,729	67	110	177	2.99	3.74	3.42
1942	23,220	29,427	52,647	61	111	172	2.62	3.77	3.27
1943	26,989	30,276	57,265	66	103	169	2.45	3.40	2.95
1944	28,318	31,294	59,612	74	81	155	2.61	2.59	2.60
1945	29,501	32,161	61,662	46	76	122	1.56	2.36	1.97
1946	31,769	35,478	67,247	33	67	100	1.03	1.89	1.49
1947	31,918	.....	69,398	38	74	112	1.19	1.97	1.61

NOTE:—Total Puerperal Deaths on this page include Acute Yellow Atrophy of the liver from 1940 onwards.

The factors concerned in the marked reduction in this rate since 1940 are indicated in the graph and in the figures presented under the classification of causes for the years 1943-47 inclusive.

TABLE III.—Maternal Mortality.

Causes of death.	No.	1943 Rate per 1,000 live births.	No.	1944 Rate per 1,000 live births.	No.	1945 Rate per 1,000 live births.	No.	1946 Rate per 1,000 live births.	No.	1947 Rate per 1,000 live births.
NEW SOUTH WALES.										
Accidents of pregnancy	17	·30	15	·25	21	·34	13	·19	19	·27
Puerperal haemorrhage	30	·52	23	·39	17	·27	16	·24	18	·26
Puerperal septicaemia	24	·42	13	·22	7	·11	8	·12	3	·04
Post-abortive septicaemia	21	·37	13	·22	6	·10	2	·03	9	·13
Thrombophlebitis embolism, sudden death	19	·33	23	·39	13	·21	11	·16	11	·16
Albuminuria and eclampsia	34	·59	54	·90	39	·63	38	·57	36	·52
Other casualties of childbirth	24	·42	14	·23	19	·31	12	·18	16	·23
Total	169	2·95	155	2·60	122	1·97	100	1·49	112	1·61
Criminal Abortion	27	·47	31	·52	17	·28	11	·16	18	·26
GRAND TOTAL	196	3·42	186	3·12	139	2·25	111	1·65	130	1·87
METROPOLITAN AREA (Statistical Metropolis).										
Accidents of pregnancy	6	·22	4	·14	7	·24	4	·13	5	·16
Puerperal haemorrhage	7	·26	12	·42	6	·20	3	·09	3	·09
Puerperal septicaemia	11	·41	7	·25	4	·14	1	·03	1	·03
Post-abortive septicaemia	8	·30	7	·25	3	·10	2	·06	1	·03
Thrombophlebitis embolism, sudden death	6	·22	9	·32	4	·14	3	·09	5	·16
Albuminuria and eclampsia	16	·60	25	·88	14	·47	13	·41	16	·50
Other casualties of childbirth	12	·44	10	·35	8	·27	7	·22	7	·22
Total	66	2·45	74	2·61	46	1·56	33	1·03	38	1·19
Criminal abortion	17	·63	18	·64	14	·47	5	·16	9	·28
GRAND TOTAL	83	3·08	92	3·25	60	2·03	38	1·19	47	1·47
REMAINDER OF STATE.										
Accidents of pregnancy	11	·36	11	·35	14	·44	12	·34	14	·37
Puerperal haemorrhage	23	·76	11	·35	11	·34	10	·28	15	·40
Puerperal septicaemia	13	·43	6	·19	3	·09	7	·20	2	·05
Post-abortive septicaemia	13	·43	6	·19	3	·09	...	...	8	·21
Thrombophlebitis embolism, sudden death	13	·43	14	·45	9	·28	8	·23	6	·16
Albuminuria and eclampsia	18	·60	29	·93	25	·78	25	·70	20	·54
Other casualties of childbirth	12	·39	4	·13	11	·34	5	·14	9	·24
Total	103	3·40	81	2·59	76	2·36	67	1·89	74	1·97
Criminal Abortion	10	·33	13	·41	3	·10	6	·17	9	·24
GRAND TOTAL	113	3·73	94	2·94	79	2·46	73	2·06	83	2·21

TABLE IV.—Criminal Abortion.

Metropolitan Area, Remainder of State, and Whole State.

Year.	Deaths from Criminal Abortion.				Total Puerperal Deaths (including Criminal Abortion).			
	Female deaths at all ages.		Female deaths at ages 15 to 44 years.		Female deaths at all ages.		Female deaths at ages 15 to 44 years.	
	No.	per cent.	No.	per cent.	No.	per cent.	No.	per cent.
METROPOLITAN AREA (Statistical Metropolis).								
1935 ...	43	·74	42	4·93	117	2·01	116	13·62
1936 ...	29	·50	29	3·34	132	2·27	130	14·96
1937 ...	17	·28	17	2·04	100	1·67	100	12·12
1938 ...	36	·57	36	4·13	108	1·71	106	12·16
1939 ...	30	·47	20	3·75	89	1·38	89	11·14
1940 ...	22	·35	22	3·17	81	1·28	81	11·59
1941 ...	21	·31	21	2·83	88	1·30	88	11·84
1942 ...	25	·35	25	3·56	86	1·21	85	12·11
1943 ...	17	·24	17	2·45	83	1·35	83	11·98
1944 ...	18	·26	18	2·45	92	1·35	91	12·38
1945 ...	14	·20	13	1·97	60	·87	59	8·95
1946 ...	5	·07	5	·78	38	·53	37	5·80
1947 ...	9	·13	9	1·41	47	·66	46	7·69
REMAINDER OF STATE.								
1935 ...	9	·19	9	1·07	165	3·41	164	19·55
1936 ...	27	·55	27	3·26	160	3·24	158	19·08
1937 ...	18	·37	18	2·41	133	2·72	133	17·78
1938 ...	14	·28	14	1·87	123	2·44	122	16·31
1939 ...	8	·15	8	1·14	111	2·11	110	15·21
1940 ...	12	·24	12	1·85	128	2·58	127	19·63
1941 ...	11	·21	11	1·57	121	2·27	119	17·00
1942 ...	12	·21	12	1·67	123	2·18	122	17·06
1943 ...	10	·18	10	1·41	113	1·98	112	15·82
1944 ...	13	·24	13	2·11	94	1·76	94	15·28
1945 ...	3	·06	3	·49	79	1·49	78	12·81
1946 ...	6	1·10	6	1·10	73	1·34	73	13·39
1947 ...	...	...	...	...	...	...	...	...
NEW SOUTH WALES.								
1935 ...	52	·49	51	3·02	282	2·65	280	16·56
1936 ...	56	·52	56	3·30	292	2·71	288	16·97
1937 ...	35	·32	35	2·22	233	2·14	233	14·75
1938 ...	50	·44	50	3·09	231	2·03	228	14·07
1939 ...	38	·32	38	2·53	200	1·71	199	13·24
1940 ...	34	·30	34	2·54	209	1·86	208	15·52
1941 ...	32	·26	32	2·22	209	1·78	207	14·35
1942 ...	37	·29	37	2·60	209	1·64	208	14·63
1943 ...	27	·21	27	1·93	196	1·52	195	13·92
1944 ...	31	·25	31	2·30	186	1·53	185	13·70
1945 ...	17	·14	16	1·26	139	1·14	137	10·80
1946 ...	11	·09	11	·93	111	·89	110	9·30
1947 ...	18	·14	18	1·59	130	1·05	129	11·38

The two groups of causes taking the highest toll of mothers' lives are haemorrhage and albuminuria and eclampsia. The first has shown a sustained reduction in the last four years. This can be attributed to the increased use of blood transfusions particularly in the metropolitan area where four mobile blood transfusion units are available. These are made available by co-operation between this Department, the Red Cross Blood Transfusion Service and the Royal North Shore Hospital, Women's Hospital, Crown Street, Royal Hospital for Women and the King George V Memorial Hospital for Mothers and Babies.

The death rate from albuminuria and eclampsia, although reduced, remains high, and is the highest rate of any group of causes, more extensive ante-natal care resulting in early recognition of toxæmia is the only way in which reduction in this group of deaths can be achieved.

The Special Medical Committee investigating Maternal Mortality have before it instances of deaths from toxæmia where a weight record during pregnancy has not been kept nor the blood pressures taken. In other instances the mother or her relative have failed to follow the advice of her medical practitioner.

The death rate from post-abortive sepsis and from abortion has been reduced since the introduction of modern chemotherapy—See Table IV.

NOTE.—Total puerperal deaths on this page include acute yellow atrophy of the liver from 1940 and onwards.

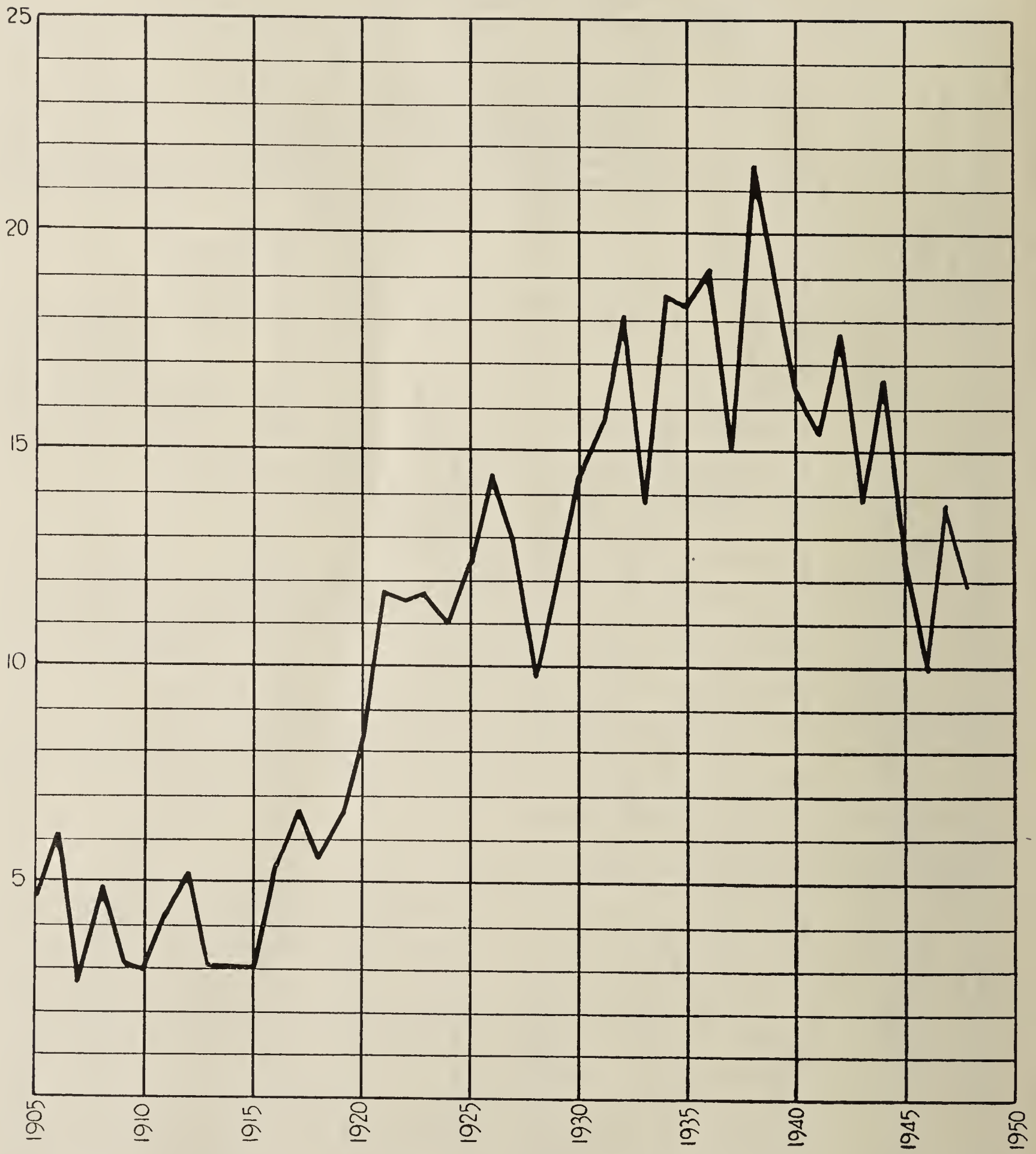
GRAPH No. II.

Deaths due to Puerperal Condition, New South Wales—Death Rates from Certain Causes per 1,000 Live Births for the Years 1895–1947



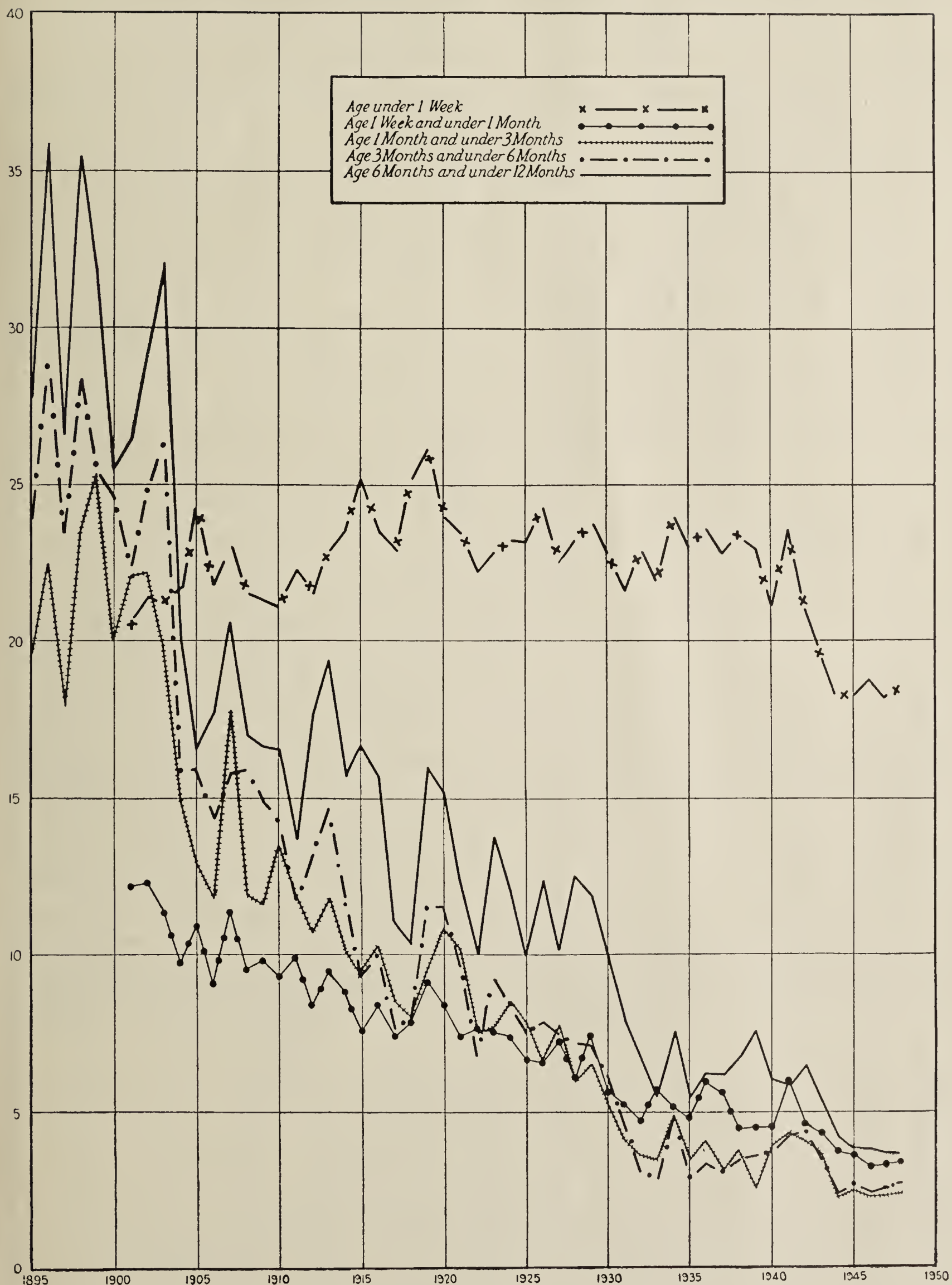
GRAPH No. 12.

Maternal Mortality—Deaths from Criminal Abortions as percentage of total Maternal Deaths in N.S.W., 1905–1947.



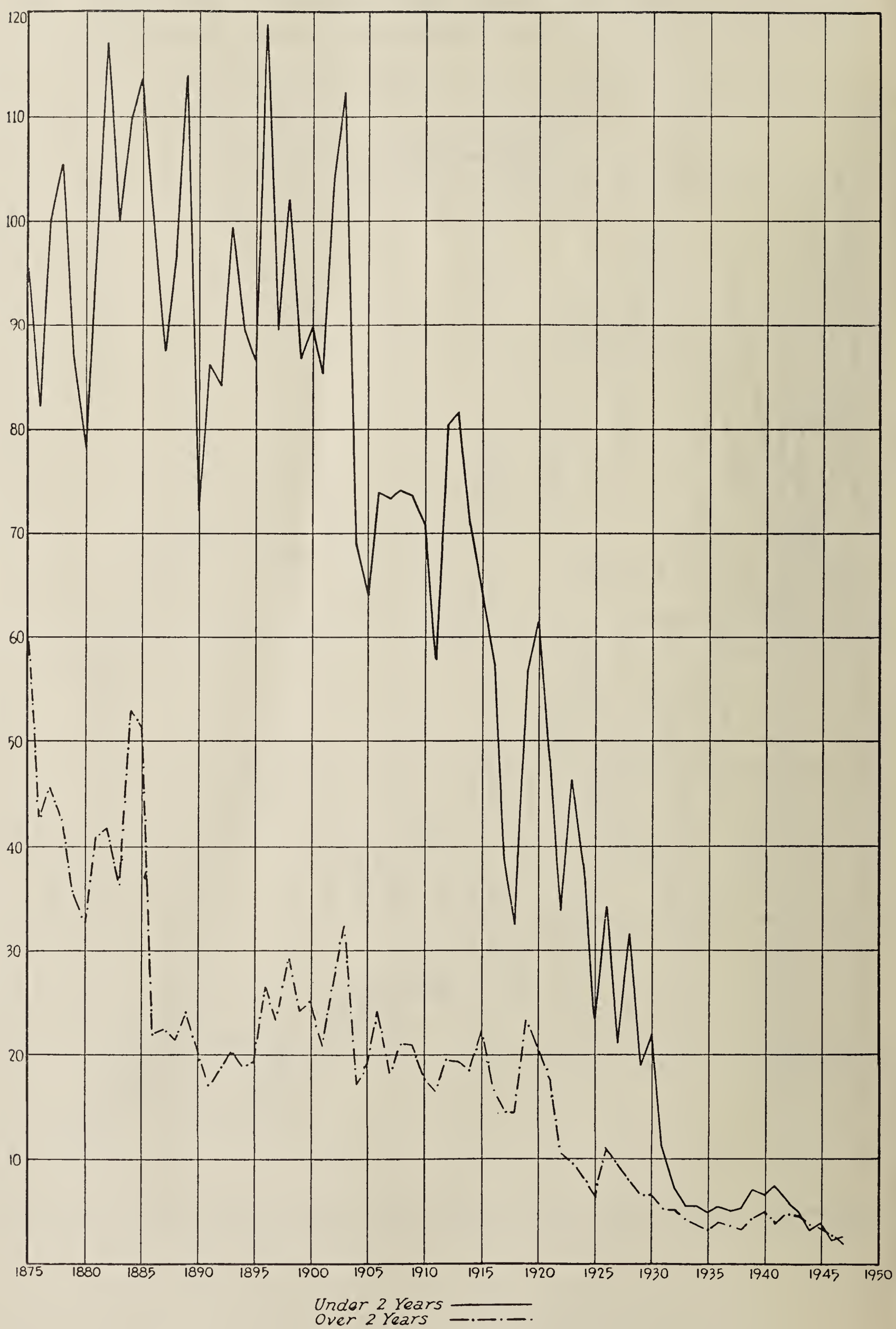
GRAPH No. 13.

Infantile Mortality, New South Wales—In Age Periods under 1 Year, from 1895–1947



GRAPH No. 14.

Diarrhoea and Enteritis—Annual Death Rate per 100,000 of the Population in New South Wales, 1875–1947.



PART II.—INFANT WELFARE.

Baby Health Centres.

The decision of the Government in 1944 to give generous financial assistance to the establishment of new Baby Health Centre premises, gave a tremendous impetus to the development of this most important field of maternal and baby welfare.

The policy provided that where in future any local organisation of approved status is prepared to co-operate in the establishment of a Baby Health Centre for use either in substitution of existing unsatisfactory premises or as a fresh or additional centre—

- (a) The Government makes a grant of 50 per cent. of the capital cost of building and equipping the Centre (exclusive of the cost of the site) and, if required, advances up to a further 25 per cent. of these costs, subject to repayment of the loan by equated payments of principal and interest over a period of ten years.
- (b) If it is not possible to erect a new building but it is possible to purchase or rent suitable premises, the Government contribute 50 per cent. of the cost of the building exclusive of the site, or alternatively, 25 per cent. of the rent payable.
- (c) In addition to any other commitments involved in (a) above, the local organisation will be required to maintain premises in good order and repair and be responsible for all maintenance upkeep such as cleaning, light and fuel, telephone charges, replacements of equipment and like service, and undertake to make the premises available at all times to the Department of Public Health for use as a Baby Health Centre free of rent.
- (d) The Government undertakes to provide also, free of cost, the necessary staff for the Centre and be responsible for any travelling and sustenance expenses of the members of such staff in accordance with the Public Service Regulations.
- (e) The arrangement will also be subject in all cases to the local organisation obtaining the approval of this Department as to location, plans and equipment of the Centre, and to the organisation further undertaking not to interfere in any way with the conduct of the activities of the Centre.

If application for Government assistance is made, it is necessary for the Council or Committee to complete a resolution embodying the condition under which such grant is accepted.

Official standard lists of equipment are used as a basis of discussion and planning and all purchases of equipment are made through ordinary commercial channels.

Payment of 50 per cent. of the costs is made on production of all receipts for all articles on an approved list of proposed purchases which has been previously submitted.

While observing the standard requirements for adequate and proper relationships of rooms for the most efficient working conditions, external appearance of general design have varied widely. The combination of domestic and institutional architecture has been the objective.

There are now 264 Baby Health Centres in the State, of which 71 are now in the Metropolitan area, 11 in Newcastle and 182 in the country.

There were twelve new buildings completed and occupied under the new policy during the year, viz., Blacktown, Cabramatta, Ganmain, Holbrook, Kurri Kurri, Lakemba, Lambton, Mandurama, Merrylands, Mortdale, Muswellbrook and Woodburn.

Additions and extensions were also constructed, with a 50 per cent. subsidy from the Department, at Bega, Guyra, Temora and Yenda.

The Baby Health Centre Staff consists of 3 Nurse Inspectors, 117 Senior Sisters and 60 Junior Sisters.

The attendances for the year were:—

Individual Attendances 105,794

Total Attendances 1,174,711

Staff Lectures.—Routine staff lectures are given each year at least once a quarter.

Departmental Booklets.—The Departmental free booklet "Healthy Motherhood" of which 50,000 are printed annually, continues to be a most valuable publication and is used by all the Metropolitan Obstetric Hospitals, the majority of Obstetric specialists and general practitioners.

Its chief aim is to raise the standard of pre-natal care by encouraging the mother to co-operate with her doctor, hospital or clinic by following implicitly the instructions given, by attending regularly, and by paying particular attention to diet during pregnancy.

In addition to this valuable instruction in pre-natal care, "Our Babies" is another free booklet from the Department, of which 25,000 are printed annually.

Country Women's Association.—I wish to express my appreciation of the valuable support given by the Country Women's Association to the Baby Health Centres, especially since the inception of the 1944 policy under which the local authority (very frequently the Country Women's Association in country areas) provides the site for the centre and 50 per cent. of the cost of erection and equipment, and maintains the centre when established. Nursing service is provided completely by this Department.

This policy has called for considerable expenditure of funds by Country Branches, and the willingness with which such financial responsibility has been undertaken by the Association, has done a tremendous amount towards furthering the Baby Health Centre service throughout the State.

Tribute to Nurse Inspectors and Nursing Staff.—I would also like to pay a tribute to the loyal and co-operative manner in which the Nurse Inspectors and the B.H.C. nursing staff have carried out their duties.

Pre-School Child.

The general interest of the community in recent years has been awakened to the needs of the pre-school child and there has been a marked demand from all sections of the community for increased facilities for this age group.

The Baby Health Centres always encouraged mothers to bring their toddlers and pre-school children to the centres for interval supervision, as the years from 0 to 5 are those in which the foundation is laid for the child's future health. These are the "vulnerable" years: the most formative period and the one of most rapid growth.

The Baby Health Centres give the parent of pre-school children instruction in simple dietetics and elementary hygiene as well as checking the weight and physical development of the child.

Unfortunately, owing to serious shortage of staff, it was found necessary, in order to continue to staff all Baby Health Centres in the city and the country, and provide advice and supervision so essential for the mothers of young infants, to discontinue temporarily in the metropolitan area the practice of seeing children aged from 2 to 5 years as a matter of routine. Advice is, however, given in any case when especially needed.

PART III.—REPORT ON THE MEDICAL SUPERVISION OF DAY NURSERIES AND NURSERY SCHOOLS FOR THE YEAR 1947.

Fourteen Day Nurseries and Nursery Schools have been supervised by Departmental Medical Officers during 1947. Dr. Mary Bertram has been responsible for Woolloomooloo, North Sydney and Mosman. Dr. Ann Henderson for Herne Bay, Forest Lodge and Newtown and Dr. Puleston Jones for Paddington, Surry Hills, Erskineville, Redfern, Kingsford, Waverley, Marrickville and Katoomba.

Of the above, Erskineville was only opened in August after being closed for re-building and Herne Bay was opened for

the first time in September. All the other nurseries were visited throughout the year.

Two hundred and six visits in all were made by the Medical Officers and 1,633 children were examined. As was the case in 1946 only a small proportion of the parents were able to be interviewed owing to the fact that they are nearly all working and find it difficult to get time off. Four hundred and forty-one mothers did, however, come up for interview. In addition, ninety-two children were seen for some specific complaint in between their routine six-monthly check up.

TABLE I.

Nursery.	1st Exam.	Parents.	Subsequent Exam.	Occasional Exam.	Dental Caries.	Not immunised.	Diseased Tonsils.	Cervical Adenitis.	Nutrition.			Knock Knees.	Flat Feet.	Bad Posture.	Sessions.
									Good.	Fair.	Bad.				
Herne Bay	59	47	...	1	11	8	27	30	56	3	...	8	4	1	7
Paddington	94	20	77	7	20	3	11	20	124	40	7	11	17	4	21
Surry Hills	94	32	52	9	25	12	16	20	101	39	6	4	6	4	20
Newtown	49	36	63	8	23	6	13	26	94	12	6	10	11	6	14
Forest Lodge	75	69	59	18	12	10	30	46	93	40	1	14	15	...	20
Erskineville	41	18	2	3	6	5	17	16	28	13	2	2	7	3	7
Redfern	99	51	65	17	16	5	22	25	111	45	8	5	9	10	22
Kingsford	42	19	48	8	1	...	14	17	66	19	5	2	5	1	12
Waverley	80	51	48	2	22	2	15	19	96	27	5	16	19	2	14
Marrickville	34	17	59	5	23	...	16	25	79	13	1	13	14	6	13
Katoomba	45	41	9	...	7	8	9	15	31	22	1	7	3	1	6
Woolloomooloo	34	19	102	3	13	15	27	18	95	70	20	31	34	21	21
North Sydney	72	17	117	10	8	7	19	12	85	71	33	21	15	18	17
Mosman	29	4	35	1	8	3	6	4	29	23	12	10	12	16	11
Totals	897	441	736	92	195	84	232	293	1,089	437	107	154	176	93	206

Nutrition.

It would appear that the general standard of Nutrition has improved since last year; the percentage of those classified as "Good" being 66.6 per cent. this year as compared with 47.3 per cent. last year. Those classified as "Fair" being 26 per cent. this year as compared with 38.9 per cent. last year. Those classified as "Bad" being 6.6 per cent. as compared with 13.7 per cent. last year. It is reasonable to suppose that this improvement is at least in part due to the regular supervision and advice given by the Medical Officers of this Department.

The menu at the nurseries is the same as it was last year, namely a hot meal in the middle of the day consisting of two courses, the first being meat, cheese and egg, plus two or three vegetables followed by a milk pudding with stewed fruit.

In addition, milk is given at morning and afternoon tea, so that each child gets a half pint of milk a day. Vitamins are given in the form of emulsion or "Potantol".

Dental Caries.

The teeth of the children in the nurseries have suffered very badly during the year on account of the fact that the dentist resigned in May and it was found quite impossible to replace him. This meant that no fillings or extractions were done from May till the end of the year, and the percentage of caries rose from 9.4 per cent. last year to 11.9 per cent. this year. One hundred and ninety-five children were found to be in need of some dental attention.

Immunisation.

Only eighty-four children were found who had not been immunised and most of those have since been done. Only very occasionally did a parent absolutely refuse to have a child immunised.

Diseased Tonsils and Cervical Adenitis.

Two hundred and thirty-two children were found to have diseased tonsils and two hundred and ninety-three had enlarged glands in their neck which could be classified as Adenitis. This is a reduction of 6 per cent. in the number of diseased tonsils on last year's figures while there is only a reduction of 2 per cent. in the case of enlarged glands of the neck. This may be accounted for by the fact that glands take some months to disappear after tonsillectomy has been performed. On the whole the mothers were found to be fairly co-operative where operation was advised. In other cases an improvement in the general nutrition of the child brought about an improvement in the throat condition.

Other Conditions.

Of the other conditions found by far the greater majority consisted of flat feet and knock-knees. One hundred and seventy-six children were found to have some degree of flat feet. One hundred and fifty-four children had knock-knees which means that there was a separation of more than one inch between the internal malleoli in the supine position. Ninety-three children were regarded as having bad posture, these were mainly in the four and five years old groups.

Some degree of phimosis was found in fifty-six of the boys. A large number of these were babies in the cot rooms. Apparently shortage of staff in the maternity hospitals is the reason given for their not being circumcised while in hospital. Some of them have since been done at the Children's Hospital out-patients, and others have been operated on by their private doctors. One or both testes were found to be undescended in twenty-six boys. Thirteen children had a squint. Fifteen had bronchitis signs in their chests. Twelve had evidence of rickets. Eleven had bow-legs. Fifteen had impetigo. Eight congenital hearts were found. Nine children had an umbilical hernia. Eight were suffering from acute tonsillitis at the time of examination. Fourteen showed some type of urticaria. Other conditions found are fully set out in Table II.

TABLE II.

Other Conditions.	Herne Bay.	Padding- ton.	Surry Hills.	Newtown.	Forest Lodge.	Erskine- ville.	Redfern.	Kingsford.	Waverley.	Marrick- ville.	Katoomba.	Woolloo- mooloo.	North Sydney.	Mosman.	Totals.
Undescended testes	...	6	...	...	3	6	1	1	3	3	2	...	...	...	26
Phimosis	2	...	10	...	11	1	6	...	6	3	1	11	5	...	56
Conjunctivitis	...	...	...	1	...	...	1	1	...	1	1	1	...	...	6
Squint	1	1	3	...	2	...	...	...	...	2	...	4	2	...	13
Umbilical hernia	...	...	...	...	...	...	1	...	3	...	1	1	3	...	9
Congenital hernia	...	...	...	...	...	...	...	2	...	...	...	...	...	...	2
Tonsillitis	...	...	4	...	...	2	...	1	...	...	...	1	...	...	8
Rhinitis	...	...	...	...	...	...	1	1	...	...	...	...	...	...	2
Bronchitis	...	2	1	...	2	1	1	...	1	...	1	3	1	2	15
Rickets	...	...	1	...	...	1	1	...	...	...	1	2	5	1	12
Congenital heart disease ...	...	...	1	...	4	...	...	1	1	...	...	...	1	...	8
Deafness	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1
Urticaria	...	...	1	1	3	...	2	4	...	...	...	...	2	1	14
Eczema	...	...	1	...	...	...	2	...	...	...	...	...	...	...	3
Ichthyosis	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1
Haemangioma	...	...	1	...	...	...	1	...	...	...	...	...	...	...	2
Anaemia	...	1	3	...	...	1	1	...	...	...	...	...	...	...	6
Mental deficiency	...	...	...	...	...	1	...	...	1	...	...	...	2	...	4
Congenital ptosis	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1
Tuberculous adenitis	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
abscess.....	...	...	...	1	...	...	1	...	...	...	...	...	...	...	2
Impetigo	...	...	1	3	...	...	6	...	...	...	...	2	3	...	15
Bow-legs	...	4	...	1	3	...	3	...	...	...	...	...	...	...	11
Tinea	...	1	...	3	...	...	1	...	...	...	...	1	...	...	6
Dermatitis	...	...	2	...	...	...	...	...	...	...	...	1	...	...	3
Hare lip, cleft palate	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1
Furuncle	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1
Subacute appendicitis	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1
Asthma	1	1	...	...	...	...	...	...	...	...	...	...	...	1	3
Seabies	...	1	...	...	...	...	...	...	...	1	...	...	...	...	2
Pigeon toes	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tachycardia	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1
Rheumatism	...	...	...	...	...	...	1	...	...	...	...	...	1	...	2
Ingrowing toe nails	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1
Paronychia	...	...	...	...	...	...	...	...	...	1	...	1	...	...	2
Stomatitis	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1

Staff.

The staffing of the nurseries has presented grave difficulties throughout the year. Teaching, nursing and domestic staffs have been working short handed with the result that those who have stayed have been overworked to such an extent that in some nurseries, they have become ill and been forced to give up. An excellent matron was lost to Paddington in this way. She was so short staffed that she frequently found that she had to do all the cooking in addition to her duties as Matron, with the result that at the end of the year she became so unwell that she had to resign. The Director at Redfern for a similar reason had to ask for three months leave to recuperate. One of the reasons for staff difficulties is the inadequacy of the pay offered, another is the long hours of work. Although matrons are supposed to have time off during the afternoon, this is mostly impracticable owing to staff shortages.

REPORT ON THE MEDICAL SUPERVISION OF KINDERGARTENS 1947.

The twenty-two kindergartens that were supervised by the Departmental Medical Officers during 1946 were again supervised during 1947 with the addition, from September onwards, of "Golden Fleece", Chippendale, which hitherto had been supervised by the City Council Medical Officer. The Department was asked to take over the work at "Golden Fleece" because it is a big student training centre and it was felt that it should therefore be brought into line with the majority of the other kindergartens as regards the actual routine of this medical examination.

"Samuel Cohen Kindergarten", after eating solely for physically handicapped children during 1945 reverted to being an ordinary kindergarten again at the beginning of 1947. It was decided that the deaf children who were still of pre-school age could in future best be served by attending the kindergarten which was situated nearest to their home.

During the year two hundred and twenty-five sessions were held at the kindergartens during which one thousand nine hundred and fifteen children were examined. This number included first examinations and re-examinations at six-monthly intervals. In addition, one hundred and three children were examined by the Medical Officers for some specific complaint at a time when their routine check up was not due. Seven hundred and forty-seven parents were interviewed during the year and this comprises very nearly the parent of every new child. It is a very rare occurrence for a kindergarten child's parent not to be interviewed at the time of the child's first examination.

Nutrition.

The general standard of nutrition shows a marked improvement on that of last year as shown in Table I.

TABLE I.			
Nutrition		1946.	1947.
Good	.....	54.2%	75.5%
Fair	.....	39.6%	22.5%
Bad	.....	6.2%	1.9%

It is reasonable to presume that this improvement is at least to some extent due to the regular supervision and advice given by the Medical Officers of this Department.

Nineteen of the kindergartens provide a cooked dinner in the middle of the day. Of the other four, Chatswood and Petersham have only a half-day programme. Cheltenham provides an Oslo lunch and the children at Killara bring their own lunch from home, but are provided with milk at the kindergarten. The Departmental dietitians have been out to every kindergarten with the exception of "Golden Fleece" to speak to the mothers about their children's diets, with the result that the fillings in the Killara children's sandwiches have improved vastly. Previously many of them brought jam sandwiches, plus a piece of cake and perhaps some chocolate as well. Now the fillings consist of lettuce, tomato and cheese, meat, etc., followed by a piece of fruit. "Potantol" is given to all the children during the winter months with the exception of Killara and Chatswood, where it is felt the children get plenty of vitamins at home. "Golden Fleece" was not included in the dietitians programme because it was so late in the year in coming under departmental supervision, but it will be included next year. The midday meal is similar to that which was provided last year, namely, a first course consisting of a meat, cheese or egg dish plus a green vegetable, a root vegetable and potatoes, followed by a second course consisting of a milk pudding and stewed or raw fruit.

Each child gets half a pint of milk a day and a piece of fruit, or orange juice with a rusk.

TABLE II.

Kindergarten.	Examina- tion.	Parent.	Subsequent examina- tion.	Occasional examina- tion.	Dental caries.	Not immunized.	Diseased tonsils.	Cervical adenitis.	Nutrition.			Knock knees.	Flat feet.	Bad posture.	No. of Sessions.
									Good.	Fair.	Bad.				
Blue Bird	41	29	65	1	14	10	13	16	77	29	...	9	18	...	12
Cheltenham	30	32	46	2	3	1	12	16	64	12	...	4	4	2	10
Glebe	31	39	68	7	10	1	19	27	74	15	...	10	9	...	10
Ellen Desailly	34	39	97	7	34	2	22	36	103	28	...	10	25	4	16
Francis Newton	40	41	35	2	21	6	10	15	44	27	4	6	6	2	9
Harold Wheen	36	42	56	17	18	7	15	20	64	25	3	6	5	...	11
Killara	41	40	41	1	5	...	15	13	69	12	1	8	6	...	8
Lance	26	25	57	1	23	7	20	18	63	19	1	8	5	...	10
Leichhardt.....	26	13	35	2	22	5	7	7	51	8	2	9	4	...	8
Little Citizens	24	30	68	7	21	4	21	31	64	26	2	6	13	2	11
Newtown	31	30	79	14	20	9	23	24	90	16	4	9	7	4	12
Parramatta	41	37	55	5	17	5	22	27	81	14	1	6	5	1	10
Peter Pan	25	28	83	5	14	3	13	20	83	24	1	12	15	...	11
Phoenix	24	38	33	6	14	1	12	19	41	13	3	7	10	2	7
Surry Hills	28	32	63	4	12	5	13	18	59	26	6	8	9	...	10
Sunbeam	33	30	49	4	28	...	18	27	65	16	1	11	4	1	9
Samuel Cohen	28	27	23	2	18	...	11	13	36	15	...	2	5	5	8
Waverley	26	31	52	2	11	3	8	16	49	26	3	10	15	...	9
Crusader	32	29	37	2	18	2	12	21	48	19	2	5	7	2	10
Croydon	29	31	50	7	7	...	10	15	57	19	3	9	8	2	11
East Chatswood	26	21	48	1	1	...	12	18	59	15	...	8	7	...	9
Petersham	32	30	27	3	14	2	9	10	48	11	...	4	5	1	7
Golden Fleece	74	53	...	1	27	1	14	25	57	16	1	6	6	...	7
	748	747	1,167	103	372	74	331	452	1,446	431	38	173	198	28	225

Immunization.

Only seventy-four children were found who had not been immunized against Diphtheria. This represents 3.8 per cent. of the total number of children examined as compared with 11.2 per cent. last year.

Dental Caries.

The total number of children found to have dental caries present was 372 or 19.4 per cent. This is an improvement on the 29 per cent. found last year, but still leaves room for a very great improvement. It has become increasingly difficult to have children's teeth attended to at the Dental Hospital. In fact only urgent work has been done there. Unless a child actually has toothache they will not give him an appointment owing to shortage of dentists. An increasing number of mothers are adhering to our advice and taking their children to private dentists, but one frequently comes across mothers who say that the dentist does not believe in filling first teeth, with the result that far too many teeth are prematurely extracted or alternatively left "till they get bad enough to extract".

Those kindergartens whose children were able to be treated by the Day Nursery Dentist last year were also unfortunate this year owing to the fact that the dentist resigned in May, and it was found impossible to replace him.

Tonsils and Adenoids.

Three hundred and thirty-one children were found to have diseased tonsils and four hundred and fifty-two had enlarged glands in their necks. These figures expressed in percentages would be as follows:—12 per cent. diseased tonsils, 23.6 per cent. cervical adenitis. A comparison with last year shows that there is a reduction of 3 per cent. in the number of diseased tonsils, but an increase of 19.6 per cent. in the number of cases of cervical adenitis. It is found very difficult to decide at what point simple enlargement of the cervical glands should be classified as an adenitis, and it is probable that this difficulty rather than an actual increase accounts for the apparent increase in the number of cases of adenitis. In future it has been decided to classify enlarged glands under two categories, namely, cervical adenitis and palpable glands. It is found that after tonsillectomy, it takes several months for the enlarged glands to subside.

Other Conditions.

Of the other conditions found, flat feet and knock-knees again head the list as regards numbers. One hundred and ninety-eight children had flat feet and one hundred and seventy-three were knock-kneed. The co-operation of the parents has been good in getting legs and feet treated, which accounts for the reduction on last year's figures as seen in following Table.

	1946.	1947.
Knock-knees	17%	9%
Flat Feet	28.8 %	10.3%

Twenty-eight children were found to have bad posture; these were practically all in the four to five year old group. The other abnormal conditions found are all set out in Table III attached.

TABLE III.

	Cheltenham.	Glebe.	Ellen Desalleys.	Francis Newton.	Harold Wheen.	Killara.	Lance.	Leichhardt.	Little Citizens.	Newtown.	Parramatta.	Peter Pan.	Phoenix.	Surry Hills.	Sunbeam.	Samuel Cohen.	Waverley.	Crusader.	Croydon.	East Chatswood.	Petersham.	Golden Fleece.	Blue Bird.	Total.
Undescended Testes	...	...	...	2	3	...	...	...	2	1	4	...	...	...	2	...	1	3	...	1	3	1	3	24
Congenital Heart Disease	...	...	...	2	...	...	...	1	...	...	...	...	1	1	...	...	...	...	1	...	...	...	1	7
Squint	1	...	2	1	1	...	1	...	1	1	1	2	...	3	1	1	...	...	...	1	1	1	2	20
Rt. Inguinal Hernia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	2
Otitis Media	...	...	...	1	...	...	...	1	...	2	...	1	...	...	...	...	...	...	...	...	...	...	1	6
Cleft Palate	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Deaf	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	1	2	1	...	...	...	9
Alveolar abscess	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	2
Phimosis	...	...	2	...	2	...	...	1	1	4	1	2	...	10	2	...	...	1	1	...	...	2	1	29
?	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	2	...	4
Rheumatic heart	...	1	...	...	1	...	...	...	...	...	...	...	...	3	...	...	...	...	...	...	...	1	...	3
Anaemia	...	...	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	6
Stomatitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Antritis	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	3
Asthma	1	1	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...	5
Umbilical hernia.....	...	...	...	...	...	...	...	...	1	3	1	...	...	...	...	1	1	1	...	...	...	...	...	8
Eczema	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...	...	2
Congenital cataract	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1
Hammer toes	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	2
Urticaria	...	...	...	1	...	...	1	...	1	2	...	...	...	...	...	...	1	...	1	...	...	...	...	7
Dermatitis	...	1	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	1	...	...	...	...	...	4
Tonsillitis.....	1	...	1	1	...	...	...	...	...	...	...	2	2	4	...	2	...	...	...	...	...	...	...	13
Bronchitis	...	...	...	...	1	...	2	...	1	...	2	4	...	1	...	1	...	...	...	...	...	...	...	12
Tinea	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	2
Impetigo	...	...	...	1	...	...	...	...	...	1	...	...	...	...	1	1	...	...	...	...	...	...	...	4
Rickets.....	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	2
Subacute appendicitis	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1
Furuncle	...	1	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	3
Hare lip and cleft palate	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1
Thryoglossal Cyst	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
Pigeon toes	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1
Scabies	...	...	...	...	...	...	...	1	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	4
Ichthyosis	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
Warts	...	...	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	2
Glandular deficiency	...	...	...	1	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	3
Sebaceous cyst	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Deformed chest	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Myasthenia gravis	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Conjunctivitis	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1

Buildings.

Phoenix and Newtown have had to reduce their number owing to inadequacy of the buildings. It is hoped that rebuilding and repairs will begin early in the new year.

There have been no new kindergartens opened during the year, but Cheltenham has had a masonite hut built in the

grounds which allows fifteen extra children to be taken. Two new toilets were also provided for these extra children. Chatswood is still awaiting permission to build their new premises.

Petersham finds the half-day programme works well, they have two separate groups of children, one of which attends in the morning and the other in the afternoon, so that there is now no overcrowding and no midday meal has to be provided.

E. TUBERCULOSIS DIVISION.

REPORT OF THE DIRECTOR FOR THE YEAR ENDED 31st DECEMBER, 1947.

Staff.

Director, Dr. H. G. Wallace.
Deputy Director, Dr. J. Hughes.
One Clerk, one messenger, ten Visiting Nurses.

Notifications.

There were 1,751 cases of pulmonary tuberculosis notified during the year, representing an increase of eighty notifications compared with the figures for 1946.

This would appear to be the result at least in part, of the establishment of new Health Districts, and of the St. George District Hospital Clinic, which has been operating for the twelve months. An increase in radiological activities at the Chest Clinics was no doubt also a factor in the detection of additional cases.

Deaths.

Deaths from all forms of tuberculosis during 1947 numbered 865, as compared with 888 for 1946, representing a decrease of 23 for the year. The tuberculosis death rate per 100,000 of population was 37.53, a slight rise in that for 1946.

Clinics.

Eight Clinics were in operation during the year 1947, at Royal Prince Alfred Hospital; Royal North Shore Hospital; the Anti-tuberculosis Association's Clinic, Albion-street; Royal Newcastle Hospital; Canterbury District Memorial Hospital; Manly District Hospital; Sydney Hospital and St. George District Hospital, Kogarah.

The following statement shows the number of X-ray examinations at Chest Clinics during the years 1946 and 1947:—

Combined total X-rays for Clinics year ended	
31st December, 1946	16,368
Combined total X-rays for Clinics year ended	
31st December, 1947	23,971
Increase	7,603

The X-ray group service by private radiologists for the years 1946 and 1947 shows the following position:—

Combined total group X-ray examinations (4 days weekly)—year ended 31st December,	
1946	9,615
Combined total group X-ray examinations (6 days weekly)—year ended 31st December,	
1947	16,000
Increase	6,385

The group service remains very popular with the general public.

Lectures and addresses were given during the year at various city, suburban, and country areas, including Bathurst, Berri-dale, Mudgee, Muswellbrook, Narrandera, Newcastle, Penrith, Singleton, Taree, Wellington, Wollongong.

Official visits were made to Bodington Red Cross Home, Wentworth Falls, to the Queen Victoria Homes at Wentworth Falls and Thirlmere, the Picton Lakes Village Settlement, R. T. Hall Sanatorium, Hazelbrook and Waterfall Sanatorium, also to Newcastle and Wollongong.

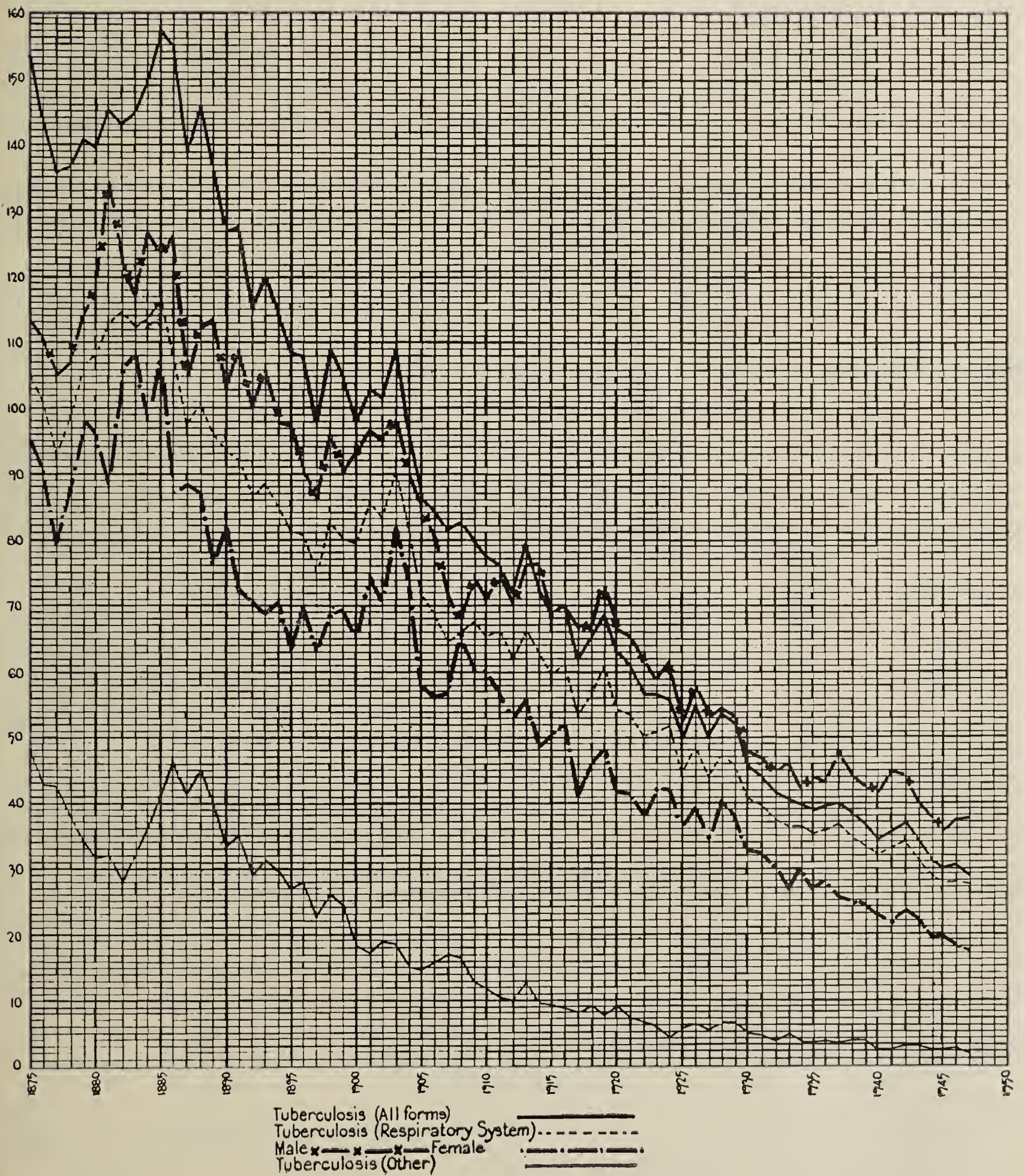
Special visits were made to, and demonstrations given at, the Royal Show at Sydney, at Newcastle during Health Week, and at Singleton and Wollongong. During the Health Week demonstration in Sydney, the Division participated as in previous years.

Meetings of the Tuberculosis Advisory Committee, set up by the Minister in 1946, were held at intervals until September, 1947, when the Committee's report was presented to the Minister for consideration.

The Division desires to express its thanks to the boards of directors and staffs of public hospitals and voluntary bodies for their continued co-operation throughout the year, as well as to those Government departments associated with it in the treatment and prevention of tuberculosis.

GRAPH No. 15.

Tuberculosis—Annual Death Rate per 100,000 of the Population in New South Wales, 1875–1947.



NOTIFICATIONS.

TABLE I.—Showing the age and sex incidence of the cases of Pulmonary Tuberculosis notified during the year 1947.

Age Period.	Metropolitan Combined Sanitary District Mean Population. 1,602,250.			Hunter River Combined Sanitary District Mean Population. 242,730.			Broken Hill Combined Sanitary District Mean Population. 27,400.			Mitchell Health District Mean Population. 114,770.			Richmond Tweed Health District Mean Population. 112,290.			South Coast Health District Mean Population. 113,960.			Remainder of State Mean Population 771,673.			Whole of State Mean Population. 2,985,073.		
	M.	F.	Total.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Under 1 year	2	1	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	3	2	5
1- 4	6	4	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	6	5	11
5-14	3	5	8	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	2	1	3	6	6	12
15-24	92	159	251	8	13	21	...	1	1	...	1	1	1	1	2	4	6	10	17	21	38	122	202	324
25-34	140	152	292	4	9	13	3	1	4	1	4	5	...	1	1	3	5	8	33	37	70	184	209	393
35-44	164	87	251	11	8	19	1	1	2	1	2	3	2	...	2	4	2	6	26	22	48	209	122	331
45-54	159	55	214	7	7	14	...	...	...	2	...	2	...	...	...	7	1	8	33	19	52	208	82	290
55-64	254	26	180	13	2	15	2	...	2	1	1	2	2	...	2	5	...	5	20	3	23	197	32	229
65 and over	91	17	108	6	5	11	1	...	1	...	1	1	...	...	...	3	1	4	24	7	31	125	31	156
All ages	811	506	1,317	50	44	94	7	3	10	5	9	14	5	2	7	26	15	41	156	112	268	1,060	691	1,751

Deaths.

TABLE II.—Showing the number of deaths from all forms of Tuberculosis in (a) Metropolis, (b) whole State, during the year ended 31st December, 1947.

	Metropolis.			Whole State.		
	Males.	Females.	Total.	Males.	Females.	Total.
Respiratory system	365	145	510	560	256	816
Meninges and nervous system.....	4	5	9	7	10	17
Other	8	8	16	18	14	32
Total	377	158	535	585	280	865

TABLE III.—Showing the age and sex of the persons whose deaths from Pulmonary Tuberculosis were notified during the year ended 31st December, 1947.

Age Period.	Metropolitan Combined Sanitary District Mean Population. 1,602,250.			Hunter River Combined Sanitary District Mean Population. 242,730.			Broken Hill Combined Sanitary District Mean Population. 27,400.			Mitchell Health District Mean Population. 114,770.			Richmond Tweed Health District Mean Population. 112,290.			South Coast Health District Mean Population 113,960.			Remainder of State Mean Population 771,673.			Whole of State Mean Population. 2,985,073.		
	M.	F.	Total.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Under 1 year	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...
1- 4	...	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	3
5-14	...	1	1	1	...	1	...	...	...	...	1	1	...	...	...	...	...	...	1	1	2	2	3	5
15-24	8	15	23	2	3	5	...	...	...	2	...	2	...	1	1	1	1	2	4	7	11	17	27	44
25-34	28	49	77	3	3	6	...	...	...	...	3	3	...	...	...	5	4	9	6	19	25	42	78	120
35-44	53	33	86	6	4	10	...	...	...	2	5	7	...	2	2	2	3	5	16	14	30	79	61	140
45-54	88	22	110	10	3	13	2	...	2	4	2	6	1	1	2	4	...	4	28	7	35	137	35	172
55-64	112	9	121	7	4	11	1	...	1	3	2	5	4	1	5	6	1	7	18	4	22	151	21	172
65 and over	75	14	89	10	2	12	4	...	4	3	...	3	3	3	6	4	1	5	31	9	40	130	29	159
All ages	365	145	510	39	19	58	7	...	7	14	13	27	8	8	16	22	10	32	105	61	166	560	256	816

TABLE IV.—Showing Institutional Accommodation available for patients suffering from Pulmonary Tuberculosis.

Sanatoria and Hospitals.	Type of Cases Received.	Number of Beds.		
		Male.	Female.	Total.
1. Waterfall Sanatorium (under Government control)	Intermediate	125	88	213
2. Randwick Auxilary Hospital (under Government control)	Late	60	60	120
3. Queen Victoria Homes (Subsidised)— Thirlmere	Early female	...	76	76
Wentworth Falls	Early male	44	...	44
4. Red Cross Society (subsidised)— “Bodington” at Wentworth Falls	Early male and female	100	1	101
“Malahide” at Pennant Hills	Late male and female.....	10	11	21
(The above institutions work in full co-operation with the Tuberculosis Division.)				
5. R. T. Hall Sanatorium .....	.....	...	16	16
6. Private Hospitals (approximately) .....	.....	...	...	69
7. Repatriation Department— Prince of Wales Hospital .....	.....	88	...	88
Lady Davidson Home .....	.....	234	...	234
8. Lidcombe State Hospital .....	.....	30	...	30
9. Lourdes Hospital .....	.....	...	19	19
10. Rankin Park Chest Hospital .....	.....	25	25	50
Total		...	...	1,081

TABLE V.—Showing number of patients receiving Institutional Treatment for twelve months ended 31st December, 1947.

	Queen Victoria Home, Wentworth Falls.	Queen Victoria Home, Thirlmere.	Red Cross Sanatorium, "Bodington" Wentworth Falls.	Waterfall Sanatorium.	Red Cross Sanatorium, "Malahide," Pennant Hills.	R. T. Hall Sanatorium, Hazelbrook.	Randwick Auxiliary Hospital.
1. Number of patients in Institution on 1st January, 1947.....	40	48	78*	229	20	12	117
2. Number of patients admitted during year	42	78	119	85	27	11	103
3. Number of patients discharged (including deaths).	41	61	102*	146†	26	11	115
4. Number of patients remaining in Institution on 31st December, 1947	41	65	95	168	21	12	105
5. Average daily number of beds occupied.....	40.54	58.76	83	208	20	12	107

* Includes 7 non-T.B. cases.

† Includes 5 non-T.B. cases.

Average Residence in Sanatoria and Hospitals.

TABLE VI.—Showing the average residence in days and condition on discharge from Sanatoria and Hospitals of patients under treatment for period of twelve months ended 31st December, 1947.

Condition on Discharge.	Queen Victoria Home, Wentworth Falls.		Queen Victoria Home, Thirlmere.		Red Cross Sanatorium, "Bodington," Wentworth Falls.		Waterfall Sanatorium.		Red Cross Sanatorium, "Malahide," Pennant Hills.		R. T. Hall Sanatorium, Hazelbrook.		Randwick Auxiliary Hospital.	
	No. of Patients.	Average Residence in Days.	No. of Patients.	Average Residence in Days.	No. of Patients.	Average Residence in Days.	No. of Patients.	Average Residence in Days.	No. of Patients.	Average Residence in Days.	No. of Patients.	Average Residence in Days.	No. of Patients.	Average Residence in Days.
1. Arrested (A.) ...	...	...	...	...	5	144	...	...	...	...	...	...	...	...
2. Quiescent (Q.) ...	8	327.87	10	313	13	316	2	1,793	...	...	...	...	...	...
3. Much Improved (M.I.)	16	400.68	22	346	6	345	...	...	3	152	7	355	4	1,064
4. Improved (I.) ...	10	203.2	17	188	38	297	43	962	2	110	2	217	25	685.56
5. Stationary (S.) ...	3	77.33	7	133	19	177	36	399	6	116	...	...	11	93.18
6. Worse (W.)	3	206.66	5	257	12	187	13	662	2	46	2	239	9	276.88
7. Dead (D.)	1	170	...	...	2	212	47	847	13	118	...	...	64	211.28

(+ 1 Silicosis 92) (+ 5 non T.B. cases) (+ 6 doubt. T.B. 80)

TABLE VII.—Showing condition of patients on admission to, and discharge, from, Institutions for the treatment of Pulmonary Tuberculosis for the twelve months ended 31st December, 1947.

Condition on Admission.	Queen Victoria Home, Wentworth Falls.								Queen Victoria Home, Thirlmere.								Red Cross Sanatorium, "Bodington," Wentworth Falls.								Randwick Auxiliary Hospital.							
	Condition on Discharge.								Condition on Discharge.								Condition on Discharge.								Condition on Discharge.							
	A.	Q.	M.I.	I.	S.	W.	D.	Total.	A.	Q.	M.I.	I.	S.	W.	D.	Total.	A.	Q.	M.I.	I.	S.	W.	D.	Total.	A.	Q.	M.I.	I.	S.	W.	D.	Total.
L1T1	...	1	2	1	...	...	...	4	...	7	11	10	3	1	...	32	3	2	2	5	1	...	...	13	...	...	...	...	...	...	...	...
L2T1	...	2	10	1	...	1	...	14	...	3	6	7	1	...	...	17	2	7	2	20	1	1	...	33	...	...	...	...	...	...	...	...
L1T2	...	...	...	1	1	...	...	2	...	...	1	...	1	...	...	2	...	...	...	1	...	...	...	1	...	...	...	1	...	...	...	1
L2T2	...	4	3	7	2	...	...	16	...	...	4	...	1	1	...	6	...	3	2	9	8	6	...	28	...	...	...	1	2	...	...	3
L3T1	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	3	...	...	4	...	...	...	12	5	...	2	19	
L3T2	...	...	1	...	...	1	1	3	...	...	...	...	...	...	...	...	...	1	...	3	2	4	2	12	...	...	...	...	...	...	...	...
L1T3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...
L2T3	...	...	...	...	...	...	...	...	...	...	...	...	2	1	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
L3T3	...	...	...	...	...	1	...	1	...	...	...	...	...	1	...	1	...	...	...	2	1	...	3	...	...	4	12	3	9	62	90	
Totals	...	8	16	10	3	3	1	41	...	10	22	17	7	5	...	61	5	13	6	38	19	12	2	95	...	...	4	25	11	9	64	113*

1 + Silicosis.
6 + Doubtful T.B.

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* + 2 non T.B.

Condition on Admlsion.	Waterfall Sanatorium.								Red Cross Sanatorium, " Malahide," Pennant Hills.								R. T. Hall Sanatorium, Hazelbrook.							
	Condition on Discharge.								Condition on Discharge.								Condition on Discharge.							
	A.	Q.	M.I.	I.	S.	W.	D.	Total.	A.	Q.	M.I.	I.	S.	W.	D.	Total.	A.	Q.	M.I.	I.	S.	W.	D.	Total.
L1T1	...	...	...	2	...	...	1	3	...	...	...	...	...	...	...	...	...	...	5	...	...	...	...	5
L2T1	...	...	...	1	2	1	...	4	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
L1T2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1
L2T2	...	1	...	3	1	...	...	5	...	...	1	1	...	...	...	2	...	...	1	2	...	2	...	5
L3T1	...	...	...	12	4	2	5	23	...	...	1	...	...	...	1	2	...	...	...	...	...	...	...	...
L3T2	...	1	...	23	29	7	30	90	...	...	1	1	3	...	2	7	...	...	...	...	...	...	...	...
L1T3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
L2T3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
L3T3	...	...	...	2	...	3	11	16	...	...	...	...	3	2	10	15	...	...	...	...	...	...	...	...
Totals ...	...	2	...	43	36	13	47	141	...	...	3	2	6	2	13	26	...	...	7	2	...	2	...	11

TABLE VIII.—Comparative Statement of work carried out by the Anti-Tuberculosis Clinics during period 12 months ended 30th June, 1947.

	Royal Prince Alfred Hospital.	Royal North Shore Hospital.	Anti-Tuberculosis Association of N.S.W.	Newcastle Throat and Chest Dispensary.	Canterbury District Hospital.	Manly District Hospital.	Sydney Hospital.	St. George District Hospital.
1. Total number of attendances (including contacts)	5,647	4,449	35,937	9,060	7,443	1,170	5,322	85
2. Number of new patients (excluding contacts) examined during the year as above...	162	179	6,718	1,030	154	221	194	37
(a) Definitely tuberculous...	123	83	145	86	97	20	68	19
(b) Non-tuberculous	39	76	6,523	650	56	201	109	18
(c) Diagnosis not completed	...	20	50	294	1	...	17	...
3. Number of contacts examined during the year	371	213	2,694	357	1,096	418	677	16
(a) Definitely tuberculous...	141	2	93	14	8	2	16	1
(b) Non-tuberculous	230	211	2,591	100	1,088	103	661	15
(c) Diagnosis not completed	...	...	10	243	...	313	...	...
4. Total number of nurses visits during the year	2,386	2,940	3,301	762	591	661	970	110
5. Number of homes visited during the year	1,149	830	3,096	389	321	99	573	78
6. Number of sputum examinations	253	278	2,235	397	368	81	280	12
7. Number of X-ray examinations	2,108	1,636	13,621	2,288	2,180	482	1,603	53
(a) New cases	...	...	...	1,030	125	172	444	37
(b) Cases previously X-rayed at the Clinic.....	...	...	...	301	859	206	736	...
(c) Contacts	...	...	...	957	1,196	104	423	16
8. Number of cases on clinic register 30th June, 1947 ...	1,723	5,129	2,280	2,084	1,627	452	1,158	53

(St. George Hospital—from 10-4-47 to 30-6-47.)

F—INDUSTRIAL HYGIENE.

REPORT OF THE DIRECTOR, DIVISION OF INDUSTRIAL HYGIENE, FOR THE YEAR ENDED 31st DECEMBER, 1947.

Staff.

Director: Gordon C. Smith, M.B., B.S.
Medical Officers: (1) J. T. Cullen, M.B., B.S. (until 30th September, 1947); (2) T. L. Dunn, M.B., B.S., D.P.H., D.T.M. & H. (from 30th June, 1947).
First Scientific Assistant: H. E. G. Rayner, B.Sc.
Scientific Assistants: H. M. Whaite, B.E.; J. L. Sullivan, A.S.T.C.; C. L. Cullen, B.Sc.
Laboratory Assistant: W. J. Brown.
Shorthandwriter and Typist: Miss B. P. Byrnes.

General.

The Division of Industrial Hygiene undertakes the investigation of hazards to health in factories, mines and industry generally; the diagnosis of cases of occupational disease, and the ventilation of theatres and public halls, including the examination of proposed plans for mechanical ventilation of such places. It co-operates with the Department of Labour and Industry and Social Welfare in the prevention of industrial diseases and with the Mines Department in problems dealing with dust and ventilation in coal mines; also with other Commonwealth and State authorities as the occasion demands.

Any person claiming to be affected by exposure to dangerous dusts, gases, fumes, or to bad ventilation or other unsatisfactory conditions of work is entitled to an examination, which is usually carried out by the staff. At times, an additional examination such as an X-ray of the chest or a report of a skin condition by a dermatologist is thought advisable and this extra service is available without cost to the worker.

Pathological examinations are made of the lungs of coal miners and workers in other dusty trades. Reports on these examinations are used in the determination of compensation claims by dependents.

Lectures and demonstrations are given periodically to groups of medical practitioners undertaking post-graduate studies, to factory inspectors, university undergraduates in engineering and to colliery officials studying for higher certificates.

It is not intended that the report will cover in detail the laboratory and field investigations carried out, but a summary has been made of the more important inquiries undertaken. It should be understood that the number of individuals reported as suffering from industrial diseases, such as lead poisoning, dermatitis and pneumoconiosis is not the total

number occurring in New South Wales for the given period, but the number examined by the staff of the Division, often after they have been examined elsewhere and been declined compensation.

Many individuals with skin or pulmonary disease are examined by insurance companies or compensation boards, and do not report to this Division, but in regard to lead poisoning, practically all persons claiming to be affected by that disease would be examined by this Division.

Overseas Visit of the Director.

At the end of 1946 the Director of the Division was awarded an official overseas travelling fellowship which enabled him, in May, 1947, to leave Australia in order to study industrial health problems in other countries. The fellowship was sponsored by the National Health and Medical Research Council of Australia which also made a financial grant, the remainder of the monetary expenses being borne by the Government of New South Wales. The Director was absent from this Division for a period of nine months, during which time he made inquiries in the United States of America, the Dominion of Canada and the United Kingdom. The inquiries were made chiefly in regard to the administration of industrial hygiene services by government departments and local authorities, medical and industrial hygiene services in private industry, occupational diseases (chiefly pneumoconiosis), university teaching in industrial health and research and investigational work.

Visits were made to health and labour departments, universities, private research organisations, factories of various types, mines and other industrial establishments in many of the chief industrial cities, and contact was made with many people prominent in the field of occupational health.

Post-Mortem Examination of Lungs of Coal Miners and Workers in Other Dusty Trades.

Lung specimens from nineteen individuals were received for examination for pneumoconiosis. In some cases the heart was sent also.

The lung specimens were examined pathologically and were chemically analysed for the amount of free and combined silica and free carbon. The details of the methods used in these post-mortem studies have been described in earlier reports of this Division.

A summary of the pathological and chemical findings of nineteen specimens is given in Table I.

TABLE I.—Showing the pathological and chemical findings of the lung specimens of sixteen (16) coal mine workers and three (3) miscellaneous workers industry occupations examined in the year 1947. Where a coal miner worked on more than one coalfield, the last mine at which he worked has been used for the purpose of classification.

Dusty Occupations, Mining, etc.				Milligrammes per gram of Dried Lung.					Content of Lungs (grams).					Remarks.
Case No.	Age.	Years of Work In—	Years since Work in—	Pathology.	Ash.	Free and Com- bined Silica.	Com- bined Silica.	Free Silica.	Car- bon.	Free and Com- bined Silica.	Com- bined Silica.	Free Silica.	Car- bon.	
COAL MINE WORKERS—NEW SOUTH WALES—SOUTHERN COALFIELD.														
211	58	42	2	Pneumoconiosis, coal dust type, very early. Pulmonary infarction. Cardiac hypertrophy. Atheroma of coronary arteries.	22.7	2.1	1.7	0.4	30.5	0.52	0.42	0.10	7.57	Coal miner in South Wales 11 years, Lithgow 6 months, South Bulli 2 years, Metropolitan 2 years, West Wallsend 2 years, Keira 7 years, and Wongawilli 17 years.
213	65	34	8	Pneumoconiosis, coal dust type, advanced. Marked emphysema.	41.1	8.1	7.0	1.1	104.0	1.65	1.43	0.22	21.22	Miner at Coledale 2 years, Maitland 6 years, Timi Shale Mine 1 year, East Greta 7 years, Metropolitan 18 years.
214	66	36	18	Pneumoconiosis, coal dust type, very early. Hypostatic pneumonia. Atheroma of aorta.	20.7	2.5	1.0	1.5	72.0	0.62	0.25	0.37	17.86	Coal miner at Mount Pleasant Colliery for a few years, and at Corrimall for 20 years.
217	57	12	2	Changes due to dust of no pathological significance.	39.3	7.8	6.8	1.0	42.0	1.82	1.59	0.23	9.82	Brushing at Coledale 3 years, coal miner Coledale 2 years, Metropolitan 4 years, South Coast No. 2, 3 years.
218	57	22	...	Pneumoconiosis, coal dust type, early; coronary sclerosis, atheroma of the aorta.	46.7	6.98	5.3	1.68	60.0	1.29	0.98	0.31	11.16	Coal miner Kembla Extended Colliery 2 years; Excelsior 20 years.
219	58	35?	...	Cardiac hypertrophy; pneumoconiosis, coal dust type, very early.	39.6	2.4	0.4	2.0	15.0	0.576	0.096	0.48	3.6	Worked 20-25 years Mount Pleasant Colliery; last 10 years as monumental mason.
223	52	27	...	Chronic bronchitis with emphysema. No evidence of pneumoconiosis.	20.7	2.5	1.4	1.1	23.0	0.48	0.27	0.21	4.37	Coal miner in South Wales 18 years; Excelsior 9 years as deputy and shotfirer.
228	41	26	1	Pneumoconiosis, coal dust type, very early.	31.1	7.6	5.7	1.9	102.0	2.05	1.54	0.51	27.5	South Bulli 10 year, Coalcliff 7 years, Excelsior 8 years, South Bulli 1 year; of which 15 years were at coal face.
230	58	44	...	Lobar pneumonia (Bilateral)...	26.3	0.7	trace	0.7	6.0	0.24	trace	0.24	2.0	21 years as tippler and 23 years as check weighman at South Bulli Colliery.
COAL MINE WORKER—NEW SOUTH WALES—WESTERN COALFIELD.														
229	64	31	14	Pneumoconiosis, coal dust type, very early.	18.9	0.57	0.2	0.37	36.0	0.15	0.05	0.1	9.9	Coal miner Newcastle and Lithgow districts for 31 years; pipe fitting steelworks for 14 years.
COAL MINE WORKERS—NEW SOUTH WALES—NORTHERN COALFIELD.														
215	62	35	2	Bronchogenic carcinoma. The changes due to dust are of no pathological or clinical significance.	37.0	4.0	1.6	2.4	45.0	0.82	0.35	0.47	8.74	Coal miner in Scotland for 10 years, and at Richmond Main for 25 years.
220	60	27	...	No pathological changes from dust inhalation. Pneumonic condition, base left lung.	34.0	1.7	0.3	1.4	10.0	0.34	0.06	0.28	2.0	Roadlayer, shiftman and coal-cutting machineman at Rhonda Colliery for 27 years.
222	58	39	5	Pneumoconiosis, coal dust type—advanced.	34.8	4.1	2.2	1.9	113.0	0.8	0.4	0.4	21.7	Worked at Minmi Colliery for 14 years and at Bellbird for 25 years, including 24 years as coalminer at Bellbird.
224	?	35-40	8	Advanced pulmonary fibrosis—siliceous type.	43.6	7.9	1.9	6.0	17.0	1.92	0.46	1.46	4.15	Coal miner in Northern coalfield for 36 years. Worked 4 years Western Australia—occupation unknown.
225	61	37	2	Pneumoconiosis, coal dust type, very early. Coronary artery atheroma; myocardial fibrosis.	38.0	2.8	2.2	0.6	28.5	0.51	0.40	0.11	5.24	Coal miner 9 years in Scotland, 1½ years in Southern coalfield and rest in Northern fields. Worked 17½ years as miner and last 19 years as shiftman.
227	59	40	...	Slight pigmentation of lungs due to coal dust. Aortic stenosis.	48.4	1.4	0.6	0.8	7.5	0.28	0.12	0.16	1.5	Worked at collieries in Yorkshire for 8 years, including 2 years as miner; Stanford Main No. 1 for 7½ years as miner; Stanford No. 2 for 5 years as miner and 20 years as deputy.
MISCELLANEOUS WORKERS IN DUSTY OCCUPATIONS.														
212	35	?	...	Changes in lungs of no pathological or clinical significance.	21.3	2.48	1.24	1.24	8.0	0.38	0.19	0.19	1.2	Shale miner at Glen Davis Shale mine.
216	52	14	22	Tuberculous broncho-pneumonia and miliary tuberculosis.	31.4	2.82	0.44	2.38	3.0	0.90	0.14	0.76	0.96	Employed on pan work and moulding at silica brick works for 14 years.
221	58	36	...	Very early silicosis. Cardiac hypertrophy and atheroma of the aorta. Hypostatic pneumonia.	45.6	3.37	1.0	2.37	2.0	0.92	0.27	0.65	0.55	Railway permanent way labourer 14 years; labourer and powder monkey dam construction 15 years; sewer maintenance 7 years.

Coal Mine Investigations.

During 1947, investigations were carried out in six southern, six northern and two western collieries. Most of these were made at the request of the Mines Department.

In one southern colliery, an examination was made of the dust concentrations prevailing at the face after shot firing. Top, middle and bottom holes were fired and the belief was confirmed that more dust was generated after firing top holes than after firing middle or bottom holes. Counts up to 6,650 particles per cubic centimetre (by Owens' Dust Counter) were obtained at the face within one minute after firing, but three minutes later the counts in most cases had fallen below 300 particles per cc.

In another southern colliery, the efficacy of two types of water spray, mounted on Jeffrey L400 loaders, was tested. No significant difference was found between the performances of the two sprays and it is doubtful whether the use of sprays reduced the concentration of airborne dust.

Following an outbreak of dermatitis amongst miners working in one of the larger Newcastle pits, several workmen and their working conditions were examined and tests were carried out on various substances (e.g., pit water, brattice cloth, washing soaps) with which the miners were likely to come in contact. The investigation failed to reveal any specific substance or substances causing the skin rashes seen.

At the request of the Chief Inspector of Coal Mines, a survey was made in three collieries of the illumination available from cap lamps at the working face. Two of these collieries were on the southern field and had a roof about 7 feet high; the third colliery was on the northern field and the roof height in the places tested ranged from 12 feet to 30 feet. The northern and one of the southern collieries were equipped with cap lamps powered by two-cell nickel-iron batteries. It was found that the three-cell cap lamp gave about 80 per cent. more light than the two-cell type and that the height of the roof did not significantly affect the illumination at the face. In most places, the standard of illumination of the face was below that considered desirable, particularly in view of the decrease in brightness of the lamps as the shift progressed. In this regard it was found that five hours from the beginning of the shift the candlepower of the cap lamps averaged only 62 per cent. of the candlepower measured one hour after the commencement of the shift.

The survey into the dust conditions prevailing in Metropolitan, Abermain, John Darling and Ivanhoe collieries and the State Coal Mine which was commenced in 1946 was continued and most of the field work completed. In addition, a number of complaints of dusty working conditions was investigated.

Metalliferous Mine Investigations.

Following requests from the Chief Inspector of Mines, Department of Mines, surveys were made of the New Occidental group of gold mines at Cobar and the Lake George Mine (which produces silver, lead, zinc and copper) at Captain's Flat. Samples were taken by Owens' dust counter for particle counts and by Greenburg-Smith Impinger for gravimetric determinations. At Cobar, most dust counts were under 300 particles per cubic centimetre, but at the Lake George Mine the dust concentrations were higher, often exceeding 1,000 particles per cubic centimetre during boring.

In most cases the highest dust concentrations occurred immediately after firing, but these were of short duration. The workmen appear to have experienced their major dust exposure during boring. This is practically a continuous operation.

Radiographs of Lungs of Workers in Dusty Trades.

Radiographs were made of the chest of 156 individuals, mostly workers in dusty trades, who attended the Division for examination. In eighty-two films there were abnormal findings, fifty-two showed increased linear markings, and twenty-two showed nodular shadows. Of the twenty-two radiographs showing nodulation, nineteen had a very early or early degree and the remainder (three) a more advanced stage. The latter three individuals had worked respectively at the following occupations for the periods shown:—

- 1. Coal miner, aged 61 years.—Ten years in Welsh coal mines and the last twenty years coal mining in New South Wales.
- 2. Tilemaker, aged 41 years.—Twenty years grinding and sieving feldspar, sand and china clays and pressing, in the manufacture of floor and wall tiles.
- 3. Rock chopper, aged 34 years.—Eight years rock chopping, including air lock work; three years metal mining.

Table II hereunder summarises the occupation and X-ray finding of the lungs of the 156 individuals examined.

TABLE II.

Occupation.	Normal.	Increase in Linear Markings.	Nodulation.
Foundry moulders	2	4	1
Foundry dressers	2	1	2
Foundry labourers	1	3	...
Boiler cleaners	1	...	...
Welders	1	...	...
Shot and sandblasters	4	3	2
Sandstone workers	3	2	4
Sandstone tunnellers	...	1	...
Metal polishers and grinders	...	5	...
Coal and shale miners	20	7	7
Metalliferous miners	5	2	3
Pipe and brickyard workers	3	2	...
Biograph operators	14	3	...
Bricklayers	...	4	1
Ash tippers	2	1	...
Tile maker	...	...	1
Fitters	3	2	1
Concrete mixers	3	1	...
Divers	3	1	...
Boiler fireman	2	2	...
Miscellaneous	13	8	...
Total	82	52	22

X-ray Examinations of Seventeen Cinema Biograph Operators.

Radiographs were taken of the chests of seventeen biograph operators who had the following histories:—

Six had worked at this occupation for under nineteen years, and mostly under ten years. The remaining eleven had been biograph operators for from nineteen to thirty-seven years. The average years of work of operators in this group was twenty-seven. Of the seventeen men examined, fourteen had normal X-rays. One who had been an operator for nine years had slight bronchitic changes in the lungs, and the other two, one with twenty-five years and the other with twenty-seven years of exposure, had advanced or well-marked bronchitic changes. In no case was there any evidence of a dust disease of the lungs or of tuberculosis. These men had asked to be X-rayed after it had been disclosed that two members of their union had developed nodular shadows of the lungs. Some had worked for a number of years in badly ventilated boxes.

A sample of the dust taken from the lamp house of the theatre in which the two affected biograph operators had worked was analysed by the Government Analyst, whose report is as follows:—

" Total SiO ₂	6.0 per cent.
Rare earth oxides	48.0 per cent.
Al ₂ O ₃ , Fe ₂ O ₃	17.0 per cent.
CaO	6.7 per cent.
Loss on ignition	2.0 per cent
Copper	Trace
Fluorides	Present
P ₂ O ₅	Present
SO ₃	Present."

The sample was too small to determine whether any free silica was present. Larger samples from two city boxes were analysed. One contained no silica; in the other the total silica was 2.6 per cent. and the free silica not more than 0.5 per cent.

Investigations in Dusty Trades.

Dust Conditions at an Ore Mill.—This factory was engaged in the grinding and calcining of various raw materials of which clay, feldspar, magnesite, limestone, diatomaceous earth and barytes comprised the greater bulk. The extent of dust hazard was investigated by measuring the concentration of dust in the air with an Owens' Jet Dust Counter, and analysing some of the raw materials and samples of settled dust from the rafters for free silica. The findings may be summarised as follows.

In the vicinity of the ball mill the average count was 650, and near a van Gelder pulveriser, 1,020 particles per cubic centimetre. The counts near a Raymond pulveriser varied from 200 to several thousand particles per cubic centimetre. Near the calciner, the average dust concentration was 115,

aud in the general atmosphere 220, particles per cubic centimetre. One of the clays contained 16.7 per cent. and another 21.8 per cent. of free silica.

As the men were exposed to high dust concentrations of a number of materials, some of which contained appreciable free silica, they were working under conditions likely to cause a dust disease of the lungs. It was recommended that the machines be placed in a state of good repair and that exhaust ventilation be applied as near as possible to all points where leakage of dust could not be effectively prevented by other means.

Excavating in Sandstone using a Channelling Machine.—Two investigations were carried out to determine the dust exposure of the operators of channelling machines and their assistants when cutting channels through sandstone. The first test was taken when a heading about 8 feet high by 7 feet wide was being cut from the basement of a multi-storey building under a busy city street. In the second job a tunnel 7 feet 6 inches wide and 7 feet high was being driven under a narrow road on both sides of a shaft 40 feet deep. In both jobs the channelling machine was fitted with water sprays, and in addition air was exhausted from the heading or tunnel.

The average dust exposure of the machine operator in the first job was 2,340 particles per cubic centimetre (Owens' Dust Counter), and the air for a distance of some feet behind the machine contained relatively large concentrations of dust, even for several minutes after the machine had stopped. This result showed that, although the water sprays probably caused some reduction in the amount of dust in the air, the method was inefficient, and the arrangement of the exhaust ventilation was faulty, because the inlet, which was placed at several feet from the face and behind the machine, was too distant from the dust source. It was recommended, therefore, that the ventilation inlet should be brought closer to the channels being cut, that is, to the point of origin of the dust, by attaching a hood to the main ventilation duct using a portable hose connection. A hood was built with a slot inlet four inches wide and of a length equal to that of the channel being cut, in this case about 40 inches. This hood was mounted along the face of the rock with the slot running vertically parallel to the channel so that the side of the channel farthest from the ventilation inlet was at all points not more than 15 inches from it. The average velocity across the face of the slot inlet was 980 feet per minute, and the volume of air exhausted 1,090 cubic feet per minute, or about 330 cubic feet per minute for each linear foot of inlet.

When the dust tests were repeated under similar conditions to the earlier tests, except that the newly designed ventilation was applied, the dust concentration was found to be below 200 particles per cubic centimetre.

Similar results were obtained in the tunnel job, the concentrations being as follows:—

Description of Exhaust Ventilation.	Average dust count near machine operator	Average dust count near assistant standing between face and machine.
	Particles per c.c.	Particles per c.c.
Special hood removed from duct. Ventilation inlet 9 feet from face.....	1,790	3,240
Special exhaust hood placed near face, but below line of cut.	1,080	1,930
Special exhaust hood placed near face and along length of cut.	205	285

Sandblasting of Steel Framework in the Construction of a Fitting-out Wharf.—In the construction of the wharf, the steel framework was sandblasted with dry sand before the concrete was poured. Some of the parts were cleaned on the wharf, but much of the work was done with the framework in situ. In the latter cases, the men worked in partly enclosed spaces.

Whilst sandblasting parts of the framework air samples were taken with an Owens' Dust Counter at five-minute intervals over a period of fifty-five minutes in the breathing zone of the sandblaster. A continuous air sample was also collected over the period of fifty-five minutes by means of a Greenburg-Smith Impinger. Before this sample was analysed it was divided into two portions by sedimentation, so that one part contained the smaller dust particles, mostly those under 10 microns in size.

The average dust concentration during sandblasting of the portalbeam shuttering was 6,250 particles per cubic centimetre. The highest single count was 18,900 particles per cubic centimetre. Chemical analysis showed the inorganic dust under 10 microns to contain 40 per cent. free silica, and the inorganic dust over 10 microns to contain 71.5 per cent. free silica.

Owing to the relatively high free silica content the dust concentration should not exceed 200 particles per cubic centimetre.

The average dust concentration during sandblasting of the H-rail girders, which were in the open, was 110 particles per cubic centimetre. The highest single count was 330 particles per cubic centimetre. The low dust count was at least in part due to the fact that a strong breeze was blowing the dust away from the sandblasters. Under less favourable conditions a dangerous dust exposure would probably occur.

It was recommended that all dry sandblasting work should be carried out with adequate protection to the worker and that this could be achieved only by the operator wearing a positive pressure respirator supplied with dust free air from a source well removed from the dusty area. Three men who had been engaged on this work for about six months were X-rayed. One man had early nodular changes in the lungs. He had previously worked for one year in air locks using a pneumatic pick.

Dust Dangers at a Brickworks.—Following complaints of dusty conditions, an iuspection was made of a brickworks and dust tests taken with an Owens' Dust Counter.

In the crusher house, dust was leaking from the tunnel under the crusher house through the floor and from the casing of the crushers. The average dust concentration in the tunnel not far from the discharge points from the crushers was about 35,000 particles per cubic centimetre. On the crusher room floor the average dust concentration was 440 particles per cubic centimetre, and at the control points 330 particles per cubic centimetre. At times men were required to work in the tunnel and to shovel on to the conveyor belt the material that had fallen on to the tunnel floor.

Excluding the gross conditions found in the tunnel, the dust exposure at working positions in the crusher house was not excessive considering the nature of the dust, and with suitable ventilation any dust hazard that might exist could be eliminated. A concentration not exceeding 400 particles per cubic centimetre would be considered satisfactory. A recommendation was made for the installation of mechanical ventilation capable of removing the dust as close as possible to the point where the crusher discharged on to the first conveyor belt.

Near the hoppers above the pan mills the average dust concentration was 760 particles per cubic centimetre of air. Several openings in the roof above the hoppers allowed some of the dust generated to escape, but mechanical ventilation was considered necessary to reduce the dust concentration to below 400 particles per cubic centimetre.

In the covered area of the main conveyor the dust concentration near the delivery end was intermittently high, but men were seldom required to work here. The men working at the brickmaking machines were not exposed to high dust concentrations.

Other Investigations into Dusty Occupations.—In addition, reports were made on the following types of work which were investigated after complaints of exposure to dust had been received.—

Rumbling, knocking out, dressing and dusting in an iron foundry; shot blasting and sand re-conditioning in a steel foundry; sandblasting identification marks on beer glasses; mixing blue metal, sand, lime, cement and bitumen in an asphalt pre-mix plant; wool dumping, trucking, dropping and sorting in three wool and skin packing stores; metal polishing of steel furniture frames; mixing and grinding of sodium fluosilicate with other materials; cleaning out of purifier boxes at a gasworks; polishing of stainless steel; dumping of pulverised coal ash; manufacture of cosmetics; dressing of small castings; trimming of lamb's wool powder puffs; repair of old pipes in a basement.

Lead Poisoning.

Two hundred and twenty individuals suspected of having lead poisoning were examined and were classified according to the standards adopted by the Division into either one or other of two groups:—

- 1. Lead poisoned with disability.
- 2. Not lead poisoned or lead poisoned without disability

Strictly speaking, lead poisoning is present in an individual when any pathological change due to lead can be demonstrated, for example, when more stippled cells than normal can be seen in the blood of a lead worker, poisoning is present, even in the absence of anaemia or symptoms. "Lead poisoning without disability" includes those cases with more stippling than normal, little or no anaemia, and no disabling symptoms.

“Lead poisoning with disability”, which is a compensable condition, occurs when disabling symptoms, anaemia and increased stippling are present.

The estimation of the amount of lead in the urine is of great value in showing whether there has been an intake of lead, but the amount found is not necessarily an index of the presence or severity of lead poisoning.

Of the twenty-seven individuals who were considered to be suffering from lead poisoning with disability, eighteen or 66 per cent. were employed in factories manufacturing electric accumulators. For some years the majority of cases of lead poisoning have come from this industry.

Table III, which follows, shows the occupation of the 220 individuals investigated and the diagnosis in each case:—

TABLE III.

Industry.	Occupation.	Number Examined.	Lead Poisoned.	Not lead poisoned or lead poisoned without disability.
Manufacture of accumulator batteries.	Moulder	3	...	3
	Lead oxidemaker ...	4	...	4
	Mixer.....	4	3	1
	Paster	9	5	4
	Formation hand	6	2	4
	Handler of dry plates	21	3	18
	Assembler	7	1	6
	Burner	6	3	3
	Repairer	10	1	9
	Other processes	7	...	7
Painting Industry	House painter	22	1	21
	Coach painter	3	1	2
	Ship painter	10	1	9
	Spray painter	11	...	11
	Paint maker	1	...	1
	Commercial painter...	2	...	2
	Loco. works and signal painter	4	...	4
Smelting of metals	Lead smelter and moulder	14	1	13
	Lead alloy mixer and furnaceman	7	2	5
	Labourer	2	...	2
	Brass moulder	2	...	2
Printing Industry	Brass furnaceman ...	2	...	2
	Hand composer	5	...	5
	Machine composer ...	9	...	9
	Other processes	2	...	2
Plumbing and other lead processes.	Plumber and solderer and soldermaker ...	6	...	6
	Lead buffer	1	...	1
	Lead trimmer	3	...	3
	Hose wrapper	1	...	1
	Lead packer and storeman	5	...	5
	Cable maker	1	...	1
Engineering Industry...	Boilermaker, oxy-acetylene and electric welder and cutter	19	3	16
	Fitter	2	...	2
	Toolmaker	1	...	1
Tetra-ethyl Lead.....	Mechanic	1	...	1
Mining	Lead miner	2	...	2
Miscellaneous	Adventitious exposure	5	...	5
Total		220	27	193

In addition to the medical examinations carried out in the laboratory, 4,722 blood slides submitted by the medical officers of fourteen factories were examined for stippled red cells and the results sent to the medical officer concerned. Nine of these factories were engaged in the manufacture or repair of electric accumulators; two were smelting metals containing lead; in another the lead exposure came from the manufacture and application of vitreous enamels; the employees in the two other plants were exposed to lead in the manufacture of glass and printing ink.

Some of these factories have, in the past, caused concern to the Division on account of the number of cases of poisoning which have occurred, and this regular examination of blood slides may be regarded as a practical means of checking the lead exposure of the employees and preventing serious cases of lead poisoning.

Blood examinations for lead poisoning were carried out also on eighty-seven railway workers who were employed in the loco. workshops (white metal workers, etc.), signal workshops (painters), in bridge breaking (welders), and in train equipment section (battery labourers).

Investigation of lead hazards in factories included the casting of lead and lead bronze in a brass foundry, and red lead braiding of wire in a copper wire factory.

In the first of these the furnaceman had been admitted to hospital and was said to be suffering from lead poisoning. The blood of his assistant contained an increased number of stippled red cells, an indication that he had had a lead intake. A sample of dust brushed from pipes and other fittings above

the lead furnace contained 5 per cent. of lead including 3.3 per cent. of lead soluble in 0.25 per cent. hydrochloric acid. The installation of local exhaust ventilation and the periodic blood examination of employees was recommended.

The employees engaged on the braiding of wire had been examined for evidence of lead poisoning on three previous occasions since 1940. They had always shown some increase in the number of stippled red cells. In the latest investigation 69 per cent. of those examined had stippled cell counts of over 1,000 per million red cells. The highest individual count was 8,000 per million red cells. In addition to the examination of the blood for stippled cells, haemoglobin estimations were also made. The results obtained indicated that approximately two-thirds of those examined had a lead intake but no evidence of disability due to lead was found. It is possible that the lead exposure was not the result of working at lead braiding for it has been found that children attending schools in the district in which the above factory is situated have an increased urinary lead excretion and a high stippled red cell count as well. These children are believed to have been affected as the result of general air contamination caused by the discharge of smoke and fumes containing lead from another industry in the same locality.

Fumes and Gases.

Benzol and Toluol.—An investigation was made of the use of benzol in the cleaning of dies used for stamping purposes. The dies were cleaned from time to time during the day by wiping them with cotton waste moistened with benzol. In addition, at the end of the day, they were cleaned over a period of twenty minutes with a brush and waste moistened with benzol. The used waste was stored under the table in an open wooden box.

The concentration of benzol in the air during cleaning was 1,800 parts per million and, although none of the employees showed any blood changes that could be attributed to inhalation of benzol, it was considered that, despite the relatively short period of exposure during each day, a potential hazard existed, due to the high concentrations of benzol in the air. An acceptable substitute for benzol was found.

In a factory engaged in the manufacture of printing inks containing toluol as a solvent, the method of transferring the finished product into 44-gallon drums for sealing and despatch introduced a potential hazard from toluol fumes. After mixing the colouring pigments, resins, and solvents in drums, the contents were baled out, using 4-gallon tins and poured into 44-gallon drums. During this operation there was found to be an exposure to toluol vapour of 500 parts per million which is above the approved maximum allowable concentration. Although the exposure was intermittent, it was suggested that the transference of the mixture should be accomplished by means of an enclosed system.

Carbon Monoxide.—A series of tests was carried out to determine whether carbon monoxide in harmful quantities was likely to be produced by coke-fired slow combustion stoves, used for the purposes of warming the atmosphere of a factory. The stoves were constructed of welded steel and were updraught in principle, being fitted with air control at the bottom and an exhaust flue, 6 feet long by 6 inches in diameter.

No carbon monoxide was detected in the atmosphere surrounding one of the stoves installed in the factory, but in the flue gas itself 0.09 per cent. was found. With one stove operating there was no carbon monoxide hazard, but it was proposed to instal twenty to thirty similar stoves and consequently there would be a corresponding increase in the amount of carbon monoxide generated. The concentration of carbon monoxide in the air would depend on the number of stoves in use and on the rate of air change. With thirty stoves and one air change per hour in the factory inspected it was estimated that the equilibrium concentration would not be greater than 0.005 per cent. This is half the usual concentration recommended as a safe standard for a full working period. Nevertheless, it was recommended that, if possible, the flue gas be conducted to the outside air.

Mercury Vapour.—Inquiries were made as to whether a mercury hazard was present in a Government gas analysis laboratory. The illness of a chemist working in this laboratory was ascribed by his medical adviser to mercury poisoning, and following this report five of the other chemists were medically examined, blood counts made and a measure made of the amount of mercury in the urine in twenty-four hour samples. The blood counts were normal. There was no evidence of anaemia as is found in some cases of mercury poisoning. The mercury in urine was found to be less than 0.005 milligramme per litre in all specimens tested. This is not conclusive evidence that there was no exposure to mercury vapour as mercury is only found in the urine in a limited number of cases.

In the absence of suitable equipment the air was not tested for the presence of mercury vapour. Although the two rooms in which exposure was considered to be greatest had been

vacuum cleaned a few weeks earlier, globules of mercury were still present on the floor, under the linoleum, and in cupboards. Dust from ledges above door height and from the top of a fume cupboard contained from 0.1 to 0.5 per cent. of mercury. A control sample of dust collected in another laboratory contained a similar amount of mercury.

It would be hard to assess the true significance of finding mercury in the dust, but it illustrates that there had been a fairly wide dispersal of mercury; it could have arisen from sweeping, vacuum cleaning, or by deposition of mercury vapour given off from hot surfaces such as calorimeters.

It was considered that there was an exposure to mercury vapour in this laboratory, but that the five employees showed no evidence of absorption of mercury.

Reports of investigations in United States of America into hazard of mercury vapour in scientific laboratories state that mercury vapour was found in the air in most cases but that in none of the sixty-one tested was the amount as great as 1 milligramme per 10 cubic metres of air, which is regarded as being the minimum concentration likely to cause mercury poisoning.

For the purpose of reducing any possible exposure to mercury vapour in the laboratories inspected, recommendations were made to immobilise any mercury present on the laboratory floors, by removing the old linoleum, cleaning the floors and treating them with oil and sulphur, and laying a sealed linoleum floor. In addition, it was recommended that benches should be fitted with collecting traps.

Chlorinated Diphenyl.—In an electric condenser factory an inquiry was made as to the dangers of using chlorinated diphenyl for the impregnation of condensers. Although the process was carried out in an enclosed system, the operators were exposed to chlorinated diphenyl fumes while unloading the condensers from the impregnation vats. As they wore no gloves or protective equipment, they came into direct contact with the oil during unloading and while handling the condensers for sealing by soldering. They were again exposed to fumes from the oil when sealing the condensers. A sample of the oil was analysed and found to contain 55.0 per cent. chlorine.

Experience overseas has shown that the higher the chlorination of diphenyl, the more toxic the compound, and that the chlorinated diphenyls are more toxic than the more frequently used chlorinated naphthalenes. Two distinct manifestations of industrial exposure have been reported from the use of chlorinated diphenyls (and naphthalenes). The fumes, as well as prolonged contact with the cold substances, may cause diffuse eruption of small pimples and sometimes a dark pigmentation of the skin of the exposed areas. When the compounds penetrate or soil the clothing, they may cause similar lesions on the covered parts, the shoulders, arms, abdomen, back, thighs and legs. The lesions begin as small comedones or pimples and may develop into cysts under the skin. Some may become secondarily infected and go on to suppuration. The pustules resemble acne vulgaris and heal slowly, often leaving permanent scars. The condition may develop soon, or after months, or even years of exposure to, or contact with these materials, and is difficult to clear up as long as the exposure remains.

A second, less frequent, condition which may result from industrial exposure is toxic destruction of the liver. This indicates systemic poisoning which may result from inhalation of vapour or fumes, from absorption through the skin, or from ingestion.

Frequently liver change is detected only after months of exposure when the patient has developed jaundice and is seriously ill.

A medical examination, including a full blood count, of the four men engaged on the above work showed no evidence that they had been affected by exposure to the fumes.

In view of the toxic nature of the material, it was recommended that a non-toxic substitute be used or that efficient exhaust ventilation be provided to remove fumes, good factory housekeeping and hygiene be practised, including the provision of protective clothing, and that periodical medical supervision of workers be carried out.

Dermatitis.

Of 149 individuals who were examined to determine whether the rash from which they were suffering was due to, or aggravated by, their occupation, 103 were considered to have a dermatitis either not due, or not proved due, to occupation. Of these six had scabies and twelve tinea.

Table IV shows the occupation in which the cases of occupational dermatitis occurred, together with the suspected causative agent.

TABLE IV.

Suspected Causative Agent.	Occupation.	Number of Cases.
Oil	Metal machinist	1
	Motor mechanic	1
	Shoe manufacturer ...	1
Solvents	Coach painter	1
	House painter	1
	Panel beater.....	1
	Rubber worker	2
	Heliograph printer ...	1
	Baker	2
Heat and humidity	Abattoirs worker ...	2
Flour	Barmaid	2
Water	Butcher.....	1
	Motor Driver	1
	Vat cleaner	1
Sugar.....	Confectioner	2
Phenol-formaldehyde resins	Museum attendant ...	1
Dyestuffs	Textile printer	3
Chromium	Lithographic printer	1
	Tanner	1
	Storeman	1
	Builder's labourer ...	1
Cement	Solderer	1
Zinc Chloride	Hairdresser	2
	Soda fountain hand...	1
Coachwood	Woodworker	1
Tobacco	Cleaner	1
Wool	Wool machinist	1
	Wool stacker	1
Insect Bites	Cook	1
	Wharf labourer	1
	House painter	3
Caterpillar Hair sensitisation ...	Cement mixer	1
Infection following injury	Leather worker	1
	Press hand	1
	Waggon builder	1
	Wool storeman	1
Total		46

Skin Rashes among House Building Employees.—An investigation was carried out in conjunction with the Department of Agriculture into the cause of skin rashes among building employees in an outer suburb.

Twenty-six (26) men were examined, comprising carpenters, plumbers and labourers. Of these, seventeen (17) had some evidence of a skin lesion. The lesion varied from a few pustules on the wrists to generalised urticaria. The majority of lesions were on the forearms, neck and waist. Recurrences of the rashes had occurred at intervals for four months.

The building site was virgin bushland with tea trees and eucalypts predominating until its clearance five months previously. Larvae and pupae of Tussock moths (caterpillars) were found in the dressing sheds and the bark of the remaining trees and stumps. There was no evidence of mite infestation.

The hairs from the larvae of these moths cause an irritating rash to man and were undoubtedly responsible for the skin irritation of the workmen. Segments of the hairs from the dried, cast skins of the larvae were found to be dispersed throughout an infested area and anyone frequenting the site could have been affected.

Methods were recommended to clean the area of the irritating hairs.

Ventilation.

Reports were made on the ventilation of a number of factories and offices and in addition, reports were made to the Chief Secretary's Department of thirty-one theatres and public halls, including the ventilation of the biograph boxes. At the request of the Chief Secretary's Department, comments were made on the plans and specifications for mechanical ventilation of three public halls.

G.—SCHOOL MEDICAL SERVICE.

Report of the Director (A. E. Machin, M.B.) for the year 1947.

Medical examination of school children was continued in both metropolitan and country districts.

In the metropolitan area, under a modified scheme, 36,564 children were fully examined, and 17,422 were given a review or partial examination during the year.

In country schools 38,982 children received a full medical examination; 1,470 were "reviewed" or examined as special cases, and 3,091 were given a special eye examination by the School Oculist.

Full examinations included 4,601 by the School Oculist, who also carried out 313 refractions and prescribed the necessary glasses. Treatment for acute and chronic eyelid conditions was also prescribed.

Miscellaneous Medical and Dental Services

A Medical Officer was attached full-time to the Sydney Teachers' College; three were engaged part-time at the Sydney, Armidale and Balmain Teachers' Colleges, and one regularly visited the Glenfield Special School. Education Department Nursery Schools were under regular supervision by School Medical Officers and School Nurses. Dental Treatment was also given at the Glenfield Special School, the Brush Farm Home (Child Welfare Department) and at the Far West Camp at Manly. One Dental Officer and one Dental Assistant were occupied part-time at the Dental Clinic maintained by this Department at the Out-patients' Department of the Royal Alexandra Hospital for Children.

Dental Service.—The Travelling Dental Clinics, in city and country districts, treated 15,862 children. Of that total, 989 visited the part-time clinic at the Out-patients' Department of the Royal Alexandra Hospital for Children.

Examinations by School Dental Officers.

	Metropolitan Schools Age 6-8 years.	Country Schools Age 6-9 years.
Number examined	16,875	6,975
Percentage found to have naturally sound mouths	8.42	6.71
Percentage found to have sound mouths with previous dentist treatment	17.29	17.16

Medical Examination and Supervision of Teachers and Students.

The medical examination of the following groups was carried out:—

1. Applicants for admission to the Teachers' Colleges.
2. Ex-servicemen wishing to enter the Teachers' Colleges.
3. Teachers and Teachers' College students returned from active service.
4. Ex-teachers and others desirous of entering the Teaching service direct.
5. Certain teachers on sick leave.
6. Teachers desirous of attending evening lectures at the University.
7. Teachers for overseas exchange teaching.

Examinations under the above headings totalled 1,881, exclusive of the many partial and review examinations of students carried out at the Teachers' Colleges and at Head Office.

Child Guidance Clinics—Medical and Psychological Examination of Children.

Numbers 1, 2 and 4 Child Guidance Clinics examined children referred by the Child Welfare Department (including the Children's Court), Teachers, School Medical Officers, parents, other branches of the Department, the Soldiers' Children Education Board, the New South Wales Society for Crippled Children and other social agencies. Re-examinations

are carried out as required. In certain cases, also, subsequent visits were paid to the Clinics for remedial tuition and for treatment. No. 3 Child Guidance Clinic undertook the examination of boys admitted to the Metropolitan Boys' Shelter and to Yasmar Hostel for Boys, and of boys referred by the Children's Court. New cases examined and/or investigated by these clinics totalled 2,462.

Other examinations included 154 children referred for medical report by the Child Welfare Department, the Registrar of Widows' Pensions, and various branches of the Education Department, were examined at Head Office during the year.

The Speech Therapists continued their work in the schools and at the Speech Therapy Centre, Blackfriars, giving 3,406 treatments.

Absences Through Sickness.

Through ill-health, 229,027 primary and secondary pupils were absent from school for an average period of 1.8 weeks. The extent to which children were affected by the various infectious and contagious diseases is shown hereunder:—

Notifiable Diseases.

Contacts are excluded only in the case of certain diseases and their absences included:—

Disease.	Cases.	Average Absence (weeks).
	No.	Per cent.
German measles	1,146	2.2
Mumps	12,028	2.6
Influenza	45,617	1.2
Measles	5,942	3.2
Sore throats	16,288	1.5
Chicken pox	13,184	2.5
Whooping Cough.....	3,813	5.3
Croup	2,992	1.4
Bronchitis and pneumonia	12,827	2.2
Ophthalmia (sandy blight)	1,301	1.7
Acute rheumatism and chorea	850	4.8
Tuberculosis	29	8.1
Injury (accidental)	14,849	2.0
Ringworm	3,184	2.8
Scabies	2,461	3.3
Impetigo	3,061	2.3
Pediculosis	1,382	1.9
Illness	87,233	1.5

NOTIFIABLE DISEASES.

Scarlet fever or scarlatina	548	5.8
Typhoid or enteric fever	12	4.9
Diphtheria and diphtheric croup	211	5.3
Infantile paralysis	34	10.9
Cerebro-spinal meningitis	35	5.6

Contacts are excluded only in the case of certain diseases and their absences included:—

Disease.	Cases.	Average absence (weeks).
	No.	Per cent.
Scarlet fever.....	682	2.8
Measles	891	2.1
Diphtheria	468	2.5

Bush Nurses have continued to act as School Nurses in isolated school localities. The work consists of lectures in hygiene, as supplied by the School Medical Service, and supervising and inspecting children in regard to their personal hygiene and cleanliness, carious teeth, etc.

Various forms of assistance were rendered the Society for Crippled Children, including notification and investigation of physically handicapped children, and the reference of suitable cases to the Far West Children's Health Scheme and the Stewart House Preventorium was continued.

H.—DIVISION OF DENTAL SERVICES.

REPORT OF THE DIRECTOR (L. PUDNEY, B.D.S., D.M.D.) FOR THE YEAR 1947.

During the year the Division of Dental Services was created and placed under the control of a Director. It incorporated two main sections—the School Dental Service and services to State Hospitals and Homes and institutions, including State penitentiaries.

Prior to the creation of the Division, the School Dental Service was included with the School Medical Service, and reports were prepared combining both services.

The complete establishment is—

Director of Dental Services	1
Area Dental Officer (Wagga Division)	1
Dental Officers	20
Senior Dental Assistant	1
Dental Assistants	11

School Dental Service

The Travelling School Dental Clinics, working in both city and country districts, examined 23,850 children. Of these,

7.92 per cent. were found to have naturally sound mouths, whilst an additional 17.25 per cent. were found to have sound mouths as a result of treatment; 74.83 per cent. were in need of treatment.

The Clinics treated 15,862 children; 38,698 temporary teeth and 3,237 permanent teeth were extracted; 16,101 permanent fillings and 21,606 other treatments were provided.

Dental treatment was also carried out at the Out-patients' Department of the Royal Alexandra Hospital for Children, the Far West Annual Camp at Manly, and the Glenfield Special School.

State Hospitals and Homes and Institutions, Including State Penitentiaries.

Plans were submitted and approved to appoint full-time permanent Dental Officers to replace private practitioners employed in these institutions.

Investigations were made into the requirements to modernise dental accommodation.

SECTION II.

MEDICAL OFFICERS OF HEALTH.

METROPOLITAN HEALTH DISTRICT.

Report of the Metropolitan Medical Officer of Health for the Year 1947. J. Grahame Drew, M.A., M.B., B.Ch. (Camb.), M.R.C.S. (Eng.), L.R.C.P. (Lond.), D.P.H., D.T.M., D.T.H. (Syd.), F.R.San.I.

The Metropolitan Area includes the City of Sydney and fifty-three (53) municipalities with Warringah and Hornsby shires.

Population—1,615,670 (31st December, 1947); mean population, 1947, 1,602,250.

Live Births—34,788.

Ex-nuptial Births—1,368 (3.93 per cent. of total live births).

Stillbirths—676.

Deaths—16,464.

Death rate per 1,000 mean population—10.28.

Infant mortality—

Total deaths under 1 week, 572.

Total deaths under 1 month, 684.

Total deaths under 1 year, 946.

Infant mortality rates per 1,000 live births—

Under 1 week, 16.44.

Under 1 month, 19.66.

Under 1 year, 27.19.

Maternal mortality—total 50 (including 10 deaths from criminal abortion). Rate per 1,000 live births, 1.44.

Causes of Death in the Metropolis.

Diseases of the Hearth.—Five thousand five hundred and forty deaths were recorded, giving a rate of 3,456 per million of mean population.

Cancer.—This disease continues to show a rise in the number of deaths recorded (2,231, giving a rate of 1,392 per million of mean population).

Accident.—This cause of death showed a slight fall in numbers, with a rate of 457 per million, compared with 464 per million in 1946.

Nephritis.—With 640 deaths due to this disease it has displaced Pneumonia from the fifth position on the list.

Pneumonia.—Six hundred and twenty-two deaths recorded.

Table of Municipalities

Alexandria.	Kogarah.
Annandale.	Ku-ring-gai.
Ashfield.	Lane Cove.
Auburn.	Leichhardt.
Balmain.	Lidcombe.
Bankstown.	Liverpool.
Bexley.	Manly.
Botany.	Marriekville.
Burwood.	Mascot.
Cabramatta and Canley Vale.	Mosman.
Canterbury.	Newtown.
Concord.	North Sydney.
Darlington.	Paddington.
Drummoyne.	Parramatta.
Dundas.	Petersham.
Eastwood.	Randwick.
Enfield.	Rockfern.
Ermington and Rydalmere.	Rockdale.
Erskineville.	Ryde.
Fairfield.	St. Peters.
Glebe.	Strathfield.
Granville.	Vaucluse.
Holroyd.	Waterloo.
Homebush.	Waverley.
Hunter's Hill.	Willoughby.
Hurstville.	Woollahra.
Ingleburn.	

Shires :—Hornsby and Warringah.

Infectious Diseases.

Diphtheria.—The reduction in the recorded number of cases of Diphtheria is striking, only 268 cases being notified. With the exception of two children, none of the children had been immunized. In those cases which had been immunized, the disease was complicated by the presence of streptococci, a point of very great significance. Five cases of diphtheria occurred in one family. No effort had been made by the parents to have their children immunized.

Where it is reported that an immunized child has contracted the disease, a virulence test is performed to eliminate the possibility of the child suffering from some intercurrent fever while carrying an avirulent type of diphtheroid. By such means it has been shown in the majority of instances that the case has not been one of diphtheria.

Immunization campaigns are now accepted regular duties of local authorities, and there is now no reason why any child should be left unprotected against the disease. By means of the press, radio, cinema and posters, parents are encouraged to bring their children to the clinics when the latter are nearing the first year of life. In a effort to pick up stragglers, adjacent councils work in with each other by staggering the dates for attendance at their respective clinics. Many thousands of children have also been immunized privately.

Scarlet Fever.—Nine hundred and fifty-six cases were reported as against 1,758 in 1946. The disease was mild with no deaths.

Anterior Poliomyelitis.—Epidemics of this disease occurred in New Zealand and South Australia. It was feared that it might spread to New South Wales but only fifty-seven cases were notified.

Too much emphasis cannot be placed on the necessity of rigid isolation of cases and child contacts immediately the disease is notified. Child contacts should be watched during the twenty-one-day period of isolation and a doctor called in on the first sign of rise in temperature of the child. Avoidance of strenuous exercise with regular rest periods are important essentials towards protecting the child against paralysis. Parents should refrain from taking children into crowded places. Adults must be discouraged from kissing children and should endeavour to keep their sputum to themselves.

Importance of personal hygiene, such as cleansing the hands after the use of the toilet, is stressed and where sewerage is not available, every effort must be taken to protect the sanitary pans against the ingress and egress of flies. Ordinance 44 (27) Local Government Act makes it obligatory on the householder to add a quantity of fly repellent such as kerosene to the pan sufficient to keep the contents free from flies. The addition of a small quantity of D.D.T. will also ensure a sanitary depot will be free from fly breeding.

Enteric Fever.—Eight cases reported. Investigation revealed that the grandmother in the family had infected her daughter and grandchild. She had suffered from an attack of typhoid fever forty years previously. Health Inspectors are advised to forward specimens of faeces and urine within an hour of passing from suspects to the Division of Microbiology, 93 Macquarie-street, Sydney. Anyone who has suffered from a suspicious illness even years previously should be looked on as a suspect and the correct tests applied.

Tuberculosis.—One thousand, two hundred and six cases reported with 405 deaths. At the present time the Division of Tuberculosis is directing a campaign in favour of mass chest X-rays. Many thousands of people have responded, and many cases of tuberculosis have been brought to light. Furthermore any person seeking entrance to the Public Service is required to undergo an X-ray examination of the chest.

The diagnosis of tuberculosis in the early stages of the disease is a most desirable object, but even more so is it most desirable to prevent the onset of disease. Thus a most important duty is placed on the Health Officers to ensure that the living conditions of the people are up to a high hygienic standard. Provision of good ventilation, cleanliness, ingress of sunlight into the home and prevention of overcrowding must form most important matters to be attained in the course of the Health Officer's discharge of his duties.

In this connection I would again appeal to the Councils to consider the appointment in their respective Areas of trained Health Visitors who could materially help through their advice to families on the art of healthful living, and could co-operate with the Tuberculosis Division Nurse whenever a case of tuberculosis is diagnosed. These Nurses, it should be noted, only come into the picture when the disease is manifest.

Typhus Fever (Endemic).—Sixteen cases were reported in 1947 as against thirty-four for 1946. In every case a careful investigation is made for the presence of rats at the patient's home or place of work, and appropriate measures taken to eradicate them if found. Here again as mentioned in previous reports and in connection with other matters, regular house to house inspections by health inspectors would go far towards reducing the number of rats to a minimum.

HUNTER RIVER HEALTH DISTRICT.—Live Births, Stillbirths, Deaths and Marriages—each local area, 1947.

District.	Popu- lation Recorded at Census 30th June, 1947.	Esti- mated Mean Popu- lation 1947.	Live Births.						Total still births.	Deaths.						Total.	Marriage.			
			Total.			Ex-nuptial included in foregoing.				All ages.			Under 1 year.				Minors.		Mark Signatures	
			M.	F.	T.	M.	F.	T.		M.	F.	T.	M.	F.	T.		M.	F.	M.	F.
Municipalities—																				
Greater Newcastle ...	127,138	126,360	1,517	1,363	2,880	41	46	87	69	673	541	1,214	46	39	85	1,586	124	475	...	1
Cessnock	13,029	13,110	164	128	292	8	3	11	4	76	47	123	11	2	13	177	28	81	...	...
Maitland	19,151	18,960	210	215	416	6	10	16	7	106	79	185	7	7	14	264	23	83	...	...
Singleton	3,940	3,940	56	49	105	4	2	6	2	26	17	43	3	1	4	73	5	20	...	...
Shires—																				
Kearsley	25,882	26,030	299	274	573	11	9	20	15	150	101	251	11	11	22	181	13	76	...	...
Lake Macquarie	42,288	41,880	474	471	495	14	14	28	28	255	151	406	18	7	25	203	20	89	...	...
Lower Hunter	6,448	6,560	56	74	130	3	2	5	4	25	23	48	1	1	2	16	5	10	...	...
Port Stephens	5,645	5,890	76	67	143	5	3	8	4	30	28	58	1	3	4	35	2	11	...	...
Hunter River Health District	243,521	242,730	2,843	2,641	5,484	92	89	181	133	1,341	987	2,328	98	71	169	2,535	220	845	...	1

HUNTER RIVER COMBINED SANITARY DISTRICTS.

Report of the Medical Officer of Health for the Year
Ended 31st December, 1947.

Staff.

Dr. J. R. Shannon, Medical Officer of Health; 1 Health Inspector; 1 Supervisory Nurse; and 1 Temporary Office Assistant.

Staff Changes: Miss E. M. Paterson, Office Assistant, resigned on 20th June, 1947, and Miss E. J. Evans commenced duty as Temporary Office Assistant on 23rd June, 1947.

The District comprises 4 municipalities, and 5 shires together with the Harbour of Port Hunter.

1. The Municipalities of:—

Cessnock	13,030
Greater Newcastle	127,188
Maitland	19,156
Singleton	3,940

2. The Shire of:—

Kearsley	27,307
Lower Hunter	4,996
Lake Macquarie	42,253
Port Stephens	5,644

243,514

3. The Harbour of Port Hunter.

Vital Statistics, 1947.

Population.—The population of the district at various dates was:—

Recorded at Census 30th June, 1933	209,465
Recorded at Census 30th June, 1947	243,521

The estimated mean population for 1947 was 242,730.

The estimated population at 31st December, 1947, was 245,090.

Live Births.—There were 5,484 live births to mothers resident in the district, equivalent to a rate of 22.59 per 1,000 of mean population. Of these 2,843 were males and 2,641 females.

Ex-nuptial Live Births.—These numbered 181, equivalent to a rate of .75 per 1,000 of mean population. The ex-nuptial live births represented 3.3 per cent. of the total live births.

Deaths.—The deaths of residents numbered 2,328, equivalent to a rate of 9.59 per 1,000 of mean population. Of these 1,341 were males and 987 females.

Infantile Mortality.—Deaths under one year of age numbered 169 equal to rate of 30.82 per 1,000 live births. Of the total deaths under one year, 107 or 63.3 per cent. were aged under one week and 128 or 75.7 per cent. were aged under one month.

Stillbirths.—There were 133 stillbirths to mothers resident in the district equal to a rate of .55 per 1,000 of mean population and representing 2.37 per cent. of all births (live and still).

Introductory—General.

The feature of the year from a Public Health viewpoint was housing. Great efforts were made by the Housing Commission and private enterprise to overtake the serious housing shortage. Public Health authorities were more concerned with the neglect and progressive deterioration of existing houses and buildings.

In the Greater Newcastle area the Department of Public Health completed a comprehensive sanitary survey, which is summarised elsewhere. A similar survey of other areas will follow.

Newcastle celebrated the 150th Anniversary of its foundation during the year. The Department of Public Health co-operated with the civic authorities during the celebrations, 8th September, 1947, to 13th September, 1947, by exhibiting a very comprehensive health educational display. Judged on attendance figures, the display was one of the most popular features of the celebrations.

Mothercraft Home for Hunter District.—During the year a public committee was instituted at the City Hall to continue the the movement to obtain a Mothercraft Home for the Hunter District. The establishment of such a home was first suggested by Dr. Robert Dick, Medical Officer of Health, twenty-eight years ago. Some progress was made in 1947. Suitable sites were inspected. The first donation for the project was received during the year, when the Miss Public Service Candidate (Miss J. Butler), for the Miss Australia Quest, gave £100 from funds collected. The money was handed over to the Lord Mayor to be held in trust for "Tresillian Newcastle".

Public Baths and Beaches.—Conditions generally were satisfactory.

Tourist Camp.—A Tourist Camping Area has been set aside near Stockton Beach. The area is sewered and a garbage service is in operation, but supervision is necessary to prevent garbage being thrown into the neighbouring undergrowth.

Barbers' Shops.—One hundred and fifty-eight premises are licensed in this category (Ord. 62). In the business area of the city, conditions were found to be satisfactory, but more rigid supervision is necessary in the outer suburbs. Sixteen premises were found to be faulty.

Boarding Houses.—A council resolution to license these premises was passed in 1945, but at the time of survey only 125 have been listed.

From 28th January to 1st February, 1947, there was a sanitary survey carried out by Officers of the Department of Public Health. Some points in the report are given—Greater Newcastle, area 28 square miles, has a population of about 140,000.

Health Administration.—The inspectorial staff comprises a Chief Health Inspector, a Deputy Chief Health Inspector, and six qualified Health Inspectors. In addition there are two men employed in rat control, one on garbage, one on mosquito eradication and three clerical.

Before the formation of the Greater City Council, five of the absorbed municipal areas were without qualified inspectors. Since 1928 two qualified Inspectors have been appointed.

The chief points made in the Survey:—

1. The necessity for appointment of additional trained and qualified Health Inspectors to the Staff.
2. Unsatisfactory supervision and maintenance of night-soil removal.
3. The garbage removal service was unsatisfactory in that:—
 - (a) Destruction by incineration was being discontinued and controlled tipping was being reverted to exclusively.
 - (b) Unauthorised garbage tips were being used by people in various areas.

- (c) Uncontrolled dumping was being resorted to in a swamp in Elizabeth-street, Wickham. Actually this dump was being used by the City Engineer for disposal of street sweepings and other rubbish.
 - (d) Household garbage was collected in almost any type of container. The Council was not enforcing Ordinance 51 in this regard.
 - (e) Vehicles used for the collection of garbage were not properly covered.
4. Street Sweeping, and cleansing was in the hands of the City Engineer. Sufficient care was not exercised in covering putrescible matter in sweepings at the point of disposal.
 5. Rat control.—Two rat-catchers were employed, one by the City Council, and one conjointly by the Council and Maritime Services Board. Rat control generally was poor and many premises, including food premises, were infested. Little attention had been given to methods of storage of goods to prevent harbourage of rats.
 6. Mosquito control.—Much has been done in this regard; 980 wet street-sumps have been treated with oil; 25,000 fish, *Gambusia affinis*, have been released in one year; nineteen prosecutions were taken under Ordinance 41. The chief remaining nuisance lies in rubbish and garbage where tins and other containers form a breeding ground for mosquitoes.
 7. In one year (1945) 312 notices were served under the Pure Food Act and thirty-two prosecutions were instituted. Much improvement is necessary to bring this section to a satisfactory level. Dirty conditions are common. Facilities for food handlers to wash their hands are often lacking. Many buildings were insanitary, and infested with vermin—more inspections are obviously required.
 8. Many premises should be declared unfit for human habitation, and closed under the provisions of the Public Health Act, 1902-44, but the general shortage of houses and buildings has restrained action being taken in this regard. The survey should be continued so that appropriate action can be taken at the earliest opportunity. Some six or more "camps" have grown up within the city area, and are merely "shanty towns" of humpies.

Food Poisoning from Eating Prawns.

During February a number of people complained of illness after eating prawns obtained in the cooked state from local fish shops. On 25th February, 1947, Dr. Helen Braye reported a series of ten of these cases. In one family only one person became ill and only that member had eaten prawns. During the next month many thousands of cases of illness of this nature occurred. Most of the persons affected were not seriously ill, but some were prostrated and compelled to be absent from work for about a week. None was admitted to Newcastle Hospital. Samples of prawns collected did not appear to be decomposed or contaminated. A series of specimens were submitted to the hospital laboratory for culture. Great numbers of organisms were grown but no particular pathogen was identified.

In November the Council for Scientific and Industrial Research, at the request of this Department, made a survey of the local prawning industry. Messrs. Scott and Oheye, of the Food Preservation Branch, were made available to carry out investigations. A few extracts from Mr. Scott's very comprehensive report are given with kind permission.

SOUTH COAST HEALTH DISTRICT.

Report of the Medical Officer of Health for the Year Ended 31st December, 1947.

Staff.

Dr. E. S. A. MEYERS, M.B., B.S., D.P.H.,
Medical Officer of Health.

Mr. K. R. HORNE,
Senior Health Inspector.

Miss O. THOMPSON,
Typist-Stenographer.

Following a Local Government inquiry held during 1946, the areas of the City of Wollongong, Municipality of North Illawarra and the Shires of Bulli and Central Illawarra were amalgamated as the City of Greater Wollongong as from the 24th September, 1947, thus reducing the number of Local Authorities in the South Coast Health District to eighteen.

During 1947, a Local Government inquiry was held at Nowra to inquire into a proposed amalgamation of the areas of the Municipalities of Nowra, Berry, Broughton Vale, Ulla-

Staphylococcal food poisoning is due to the formation in the food of the entero-toxin, to which man is susceptible. Significant amounts of entero-toxin cannot be formed in the absence of very large populations of the Staphylococci, and such numbers can only develop after holding at favourable temperatures for a sufficient time. It is quite clear that, in the absence of refrigeration, prawns may develop very large bacterial populations within twenty-four hours at summer temperatures. It has also been shown that uncooled salted prawns favour the development of salt-tolerant bacteria, including Staphylococci. It is known that entero-toxin-producing Staphylococci are of widespread occurrence, that they are able to grow readily in salty foods such as ham, and that they may produce significant amounts of entero-toxin in twelve hours at 98° F. During the summer the average temperature of prawns may well be as high as 75 to 80° F. and under present conditions very few of the prawns would be available for purchase from retail shops within twelve hours of cooking, while intervals of twenty to twenty-four hours would not be uncommon. The conditions of handling salted prawns in the Newcastle area during summer are, therefore, such as may be expected to lead to outbreaks of Staphylococcal food poisoning. One outbreak in the Motum family at Tamboy appears to have been of this type. The outbreak occurred early in 1947 at Bulahdelah and was attributed, by the medical practitioner, to the consumption of prawns. The prawns were consumed at an evening function and had been caught at Tamboy and cooked some twenty to twenty-four hours previously. The incubation period was from two to four hours approximately. This outbreak is very characteristic of Staphylococcal food poisoning, and is the only one where the origin and history of the prawns were known.

Apart from questions of food poisoning it is evident that handling of prawns without refrigeration results in a very short storage life before the onset of spoilage, and there seems to be no reason why prawns should not be iced as soon as possible after cooking. Icing would also be most advantageous where freezing is contemplated as further deterioration during slow freezing would be considerably reduced. The elimination of cooling in contaminated water would also extend the storage life of the cooked prawns, but the substitution of air cooling alone could scarcely be recommended until it was known whether an attractive product could be obtained in this manner.

Briefly then it may be stated that the present studies provide no proof of the cause of the reported food poisoning, but they do show that the present conditions of handling are such that bacterial food poisoning could readily occur under summer conditions.

Tuberculosis Control in 1947.

"Rankin Park" Chest Hospital.—This new chest hospital, situated on New Lambton Heights, opened for admission of patients during the year. The administration is shared by the Red Cross Society and the Newcastle Hospital, and 100 beds are to be available pending the completion of the Hospital buildings. Miss Croll was appointed Matron.

Mass X-ray of School Children.—The "Apex Club" sponsored a chest survey of school children during the year.

Visit of Dr. Wunderley.—On 11th July, 1947, Dr. Wunderley, Commonwealth Director of Tuberculosis visited Newcastle. He was accompanied by Dr. H. G. Wallace, Director of Tuberculosis Division, New South Wales Department of Public Health. An inspection was made of the services for sufferers from T.B. in the district with a view to completing a Commonwealth wide survey and report.

dulla and South Shoalhaven and the Shires of Cambewarra and Clyde into one Local Authority to be known as the Shoalhaven Shire.

Evidence was given at the inquiry by an officer of this branch. The proposed amalgamation was supported as it was considered it would mean an improvement in the health administration of the areas concerned.

The recommendation of the Commissioner has not as yet been announced.

Vital Statistics.

Population.—The population of the district at 31st December, 1947, was estimated at 116,090, while the estimated mean population for 1947 was 113,960.

Marriages.—During 1947, 823 marriages were celebrated in the district, equal to a rate of 7.22 per 1,000 of mean population.

Live Births.—There were 2,651 live births to mothers resident in the district, equivalent to a rate of 23.26 per 1,000 of mean population. Of these, 1,383 were males and 1,268 females.

Ex-nuptial Live Births.—These numbered ninety-five, equivalent to a rate of 0.83 per 1,000 of mean population. The ex-nuptial live births represented 3.58 per cent. of the total live births.

Deaths.—The deaths of residents numbered 972, equivalent to a rate of 8.53 per 1,000 of mean population. Of these, 555 were males, and 417 females.

Infantile Mortality.—Deaths under one year of age numbered ninety-five, equal to a rate of 35.83 per 1,000 live births.

Stillbirths.—There were fifty-nine stillbirths to mothers resident in the district, equal to a rate of 0.52 per 1,000 of mean population, and representing 2.18 per cent. of all births (live and still).

SOUTH COAST HEALTH DISTRICT.
Marriages, Live Births, Stillbirths and Deaths—Each Local Government Area, 1947.

District.	Area 31st December, 1947.	Estimated Population.		Mar- riages.	Live Births.						*Deaths.						Stillbirths.						
		31st Decem- ber, 1947.	Mean 1947.		Total.			Ex-nuptial.			All Ages.			Under 1 year.			Total.			Ex- nuptial.			
					M.	F.	Total.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	
Aeres.																							
Municipalities—																							
Berry	40,300	2,800	2,780	14	44	32	76	1	1	2	15	12	27	2	1	3	1	2	3	...	...	...	
Bowral	3,234	3,680	3,640	50	46	54	100	7	15	22	18	17	35	...	1	1	...	1	1	...	...	...	
Broughton Vale ...	21,500	190	190	...	4	1	5	...	...	...	1	1	2	1	...	1	...	...	...	...	...		
Camden	10,985	2,970	2,930	33	35	29	64	...	...	...	14	11	25	...	1	1	...	1	1	...	...	...	
Gerrington	20,110	890	880	5	10	13	23	...	...	...	3	6	9	...	...	...	1	...	1	...	...	...	
Jamberoo	40,468	930	930	2	10	8	18	...	...	...	8	4	12	1	1	2	...	...	...	...	...	...	
Kiama	2,548	2,280	2,270	22	29	16	45	1	...	1	9	8	17	1	...	1	...	1	1	...	...	...	
Nowra	16,730	3,640	3,570	60	52	50	102	1	3	4	22	20	42	1	2	3	4	1	5	...	...	...	
Shellharbour	38,244	3,210	3,100	10	35	51	86	3	4	7	16	16	32	3	1	4	1	...	1	...	...	...	
Shoalhaven, South	27,635	790	790	...	4	9	13	1	...	1	1	2	3	...	1	1	...	...	...	...	...	...	
Ulladulla	28,448	1,870	1,830	11	27	20	47	...	1	1	14	9	23	2	1	3	...	...	...	...	...	...	
Wollongong, Greater	176,416	64,130	62,580	521	769	678	1,447	17	17	34	264	209	473	28	20	48	20	17	37	...	2	2	
Shires—																							
Camdewarra	119,040	1,300	1,290	4	15	20	35	...	2	2	11	7	18	1	1	2	...	...	...	...	...	...	
Clyde	897,920	2,280	2,240	1	26	23	49	1	3	4	19	9	28	6	2	8	...	...	...	...	...	...	
Nattai	369,225	5,470	5,470	12	41	52	93	3	1	4	32	27	59	1	1	2	2	...	2	...	...	...	
Nepean	111,040	4,470	4,410	8	58	40	98	3	1	4	18	12	30	5	...	5	1	...	1	...	...	...	
Wingecarribee	340,754	7,290	7,240	48	90	82	172	2	2	4	36	20	56	5	2	7	3	...	3	...	...	...	
Wollondilly	632,092	7,900	7,820	22	88	90	178	2	3	5	54	27	81	3	...	3	...	3	3	...	...	...	
South Coast Health District	2,896,689	116,090	113,960	823	1,383	1,268	2,651	42	53	95	555	417	972	60	35	95	33	26	59	...	2	2	

* Figures for under one month and under one week not available.

General.

During the year, further evidence of the general apathy on the part of Councils to implement health administration presented itself. The reluctance on the part of some Councils to employ qualified Health Inspectors and on the part of others to employ an adequate staff of Inspectors, showed that Local Government has yet a long way to go before it shows a true appreciation of its responsibility of health administration.

The key-stone of public health is a healthy environment and the importance of this cannot be over-estimated. It would appear that some consideration might be given to the introduction of a more satisfactory method of health administration in this aspect than at present exists in this State.

Health Inspectors.

During the year Bulli Shire appointed an additional Health Inspector to its staff and he has commenced duty. Wollondilly Shire Council also appointed a qualified Health Inspector, but owing to housing difficulties he has not yet taken up his appointment.

The City of Wollongong and the Municipality of Bowral both appointed and are now employing cadet Inspectors.

The Municipality of Ulladulla and the Clyde Shire abandoned the idea of a joint appointment and each agreed to appoint a qualified Health Inspector as from the 1st January, 1948, and have advertised for these officers.

Following a refusal of the Wingecarribee Shire Council to appoint at least one additional Health Inspector a sanitary survey of that Council's area was carried out. The survey confirmed the contention of the Department that the sanitary conditions within the Shire were unsatisfactory and the Department again asked the Council to appoint at least one additional Health Inspector. The matter is still under consideration by the Council.

Following the creation of the City of Greater Wollongong, Mr. E. Way was appointed Chief Health Inspector. It was noted with regret that at the fixing of salaries of Council's officers that the salary of the Chief Health Inspector was the lowest of all Senior Officers. Considering that the major part of the work of a Council is directly or indirectly connected with health it is difficult to understand the low status granted Health Departments of Councils.

Diphtheria Immunisation.

With the co-operation of the Wollongong City Council and the Board of the Wollongong District Hospital arrangements were made to hold a continuous series of diphtheria immunisation clinics throughout the year. These clinics were comparatively well attended and were of considerable service to the community.

In addition, various Councils conducted clinics at which the attendances were satisfactory.

With the co-operation of the District Inspector of Schools, information was sought from fifty-five primary and secondary public schools on the South Coast concerning the number of children immunised, and not immunised, against diphtheria, and of those immunised, whether the treatment had been given at clinics conducted by local Councils, or by private arrangement.

Of the fifty-five schools, fifty-two furnished the desired information.

The survey revealed that of the 10,103 children questioned, 7,664 (75.8 per cent.) had been immunised against diphtheria. Of the 7,664 immunised, 4,399 (57.3 per cent.) had been immunised at clinics conducted by local Councils, and 3,196 (41.7 per cent.) had been treated privately. Sixty-nine children (1 per cent.) were unable to state where they had been immunised.

At individual schools, the percentage of children immunised ranged from 45.5 per cent. to 100 per cent.

10	schools (total children 198)	attained 100 per cent.
7	" "	1,092 were within the range 90 to 99.9 per cent.
11	" "	2,407 " " 80 to 89.9 "
11	" "	3,479 " " 70 to 79.9 "
10	" "	2,176 " " 60 to 69.9 "
2	" "	729 " " 50 to 59.9 "
1	school (Total children 22)	was within the range 40 to 49.9 per cent.

The number of cases of diphtheria (thirteen) which occurred within the South Coast Health District was the lowest on record and was a very definite indication of the value of immunisation against diphtheria.

Health Education.

Efforts towards the education of the community in health were continued. Weekly radio talks over Station 2WL at Wollongong were given during the early part of the year, but were discontinued at the expiration of the contract. Numerous articles on health matters of topical interest were supplied to the local press and a number of talks given to various organisations.

Two series of lectures on food handling, each series comprising three lectures, were given to employers and employees of food stores at Wollongong. These lectures were arranged with the co-operation of the Wollongong Traders' Association.

It is felt that the lectures have resulted in an improvement in the hygiene of food stores in Wollongong.

In conjunction with the 1947 Wollongong Show a Health Exhibition was arranged at the Town Hall Annexe, Wollongong.

The attendance at this exhibition was over 12,000 persons, which was considered most satisfactory.

As usual, Departmental posters and pamphlets were forwarded to Local Authorities for display and distribution.

Control of Tuberculosis.

To date, nothing definite has been arranged regarding the establishment of a chest clinic at the Wollongong District Hospital. This clinic is urgently required.

Medical and Dental Services.

During the year, Wollongong District Hospital opened a pathological laboratory at the Hospital.

This should fill a long-needed want and be of considerable value to all practitioners in the District.

In my last report I commented on the need for a dental hospital to supply the wants of a large section of the population. The need is still here and increases each year.

Medical Examinations.

During 1947 twenty-five medical examinations on behalf of the Public Service Board were conducted at this office.

General Sanitation.

Sanitary surveys were made of the Ulladulla Municipality and the Clyde Shire.

Conditions found revealed neglect on the part of the Municipality of Ulladulla to carry out its obligations relating to Health Administration and, in a lesser degree, similar neglect was found in the Clyde Shire.

These inspections fully supported this Department's request that Certificated Health Inspectors should be employed by both Local Authorities.

A sanitary survey was also made of the Wingecarribee Shire and this survey supported the action on the part of this office in requesting Council to employ additional Health Inspectors.

Noxious Trades Act, 1902.

Applications for licences under this Act were received and dealt with as follows:—

Pig-keepers	45
Fat Extractors	37
Poultry Farmers	6
Knackers	3

Following inspections refusal of issue of licence was recommended in the cases of three pig-keepers, one fat extractor and one poultry farmer. The remaining applications were recommended for approval.

During the inspections it was found that generally the structural and sanitary conditions of the premises were an improvement on those found during 1946.

Cattle Slaughtering and Diseased Animals and Meat Act, 1902.

The control of the administration of premises under this Act was transferred to the Department of Agriculture to take effect as from the 30th April, 1947.

Water Supplies.

Five water supplies were investigated and twelve samples of water for chemical analysis and thirteen for bacteriological examination were collected during the year.

The water supplies at three butter factories which were found to be unwholesome during 1946 are now being treated to ensure that a potable water is used in connection with the manufacture of food products at these factories.

Approval to the provision of a reticulated water supply for the town of Helensburgh has been granted and it is understood that the work has been given a high priority.

Rat Infestation.

Rat infestation continues to be a health hazard in this district. Garbage depots, controlled by Local Authorities, were found in many instances to be infested with rats and action was taken in each instance to control such infestation.

Rat poison is supplied by a few Councils to the community, and except for this it can be said that no positive action is taken by any Local Authority in this district to control rat infestation.

Sewerage.

At the request of Central Illawarra Shire Council representations were made to the proper authorities in an endeavour to have sewerage facilities extended to Port Kembla and Dapto, and preliminary investigations and estimates have been prepared by the Metropolitan Water, Sewerage and Drainage Board for these towns.

Septic Tanks.

Twenty inspections of existing septic tanks and 112 inspections of sites for proposed septic tanks were made during the year. Ninety-four applications for approval were received and dealt with. Approval was recommended in all cases except one, which was recommended for refusal.

The increased number of inquiries and applications for approval for septic tank installations emphasise the growing public demand for water carriage sewerage in homes.

Nightsoil Disposal.

Thirty-two inspections were made of existing nightsoil depots and four inspections of land for proposed new nightsoil depots were made during 1947.

It came under notice that the Bulli Shire (now incorporated within the City of Greater Wollongong) was using a hopper and wooden stave pipes to convey nightsoil to the disposal trenches—a method not approved by the Board of Health.

Action was taken to have this method discontinued but is not yet finalised.

Action was also taken to cause the Bowral Municipal Council to discontinue the use of its existing depot. Several proposed sites were inspected but objections were raised against each site selected and finally it was arranged that portion of the sanitary depot at Fitzroy used by the Nattai Shire Council be used by the Bowral Council.

Finality in this matter awaits the release of a suitable motor chassis for use in the service.

Extensions to or new scavenging districts for removal of nightsoil were investigated as follows:—

Municipalities of:—

Shellharbour	1
Berry	2

Shires of:—

Clyde	1
Nattai	1

Garbage Disposal.

Twenty-eight inspections of existing garbage depots were made during the year.

Methods of disposal of garbage at depots within the District are still far from satisfactory. The continuous attention to the proper covering of the garbage deposited is not always carried out and Local Authorities appear loath to expend money on covering the deposited garbage with earth. Constant attention is being given to this matter.

It would appear to be a weakness in the law to depend on the present phrasing of Local Government Ordinance No. 51, clause 7 (d). Councils, to save earth cover, set fire to the garbage, and in very dry weather may succeed in burning a large percentage of the garbage within twelve hours but during wet weather this is not practicable. In any case the burning of garbage in the open causes odour and smoke nuisances and attracts flies. This method of disposal also is favourable to rats.

It is suggested for consideration that burning should be permitted only when done in an approved type of incinerator and the Ordinance be amended to meet this requirement.

Nuisances.

A large number of complaints relating to nuisances were received during the year. The Councils are first contacted with regard to these complaints and then action is taken to follow up the matter to see that each nuisance is abated.

One hundred and sixty-five inspections were made regarding nuisances during the year.

Pure Food Act, 1908.

Constant endeavours were made during the year to improve the standard of food hygiene.

It is felt that an improvement has resulted, but this work requires constant supervision which can be given only by a Pure Food Inspector.

This office has not been informed as to whether it is proposed to appoint a Pure Food Inspector to the staff of the Medical Officer of Health and the opportunity is again taken of stressing the urgent need of such an appointment in the interests of the health of the community.

Tourist Camps.

During the year a circular letter was sent to Councils in the District suggesting minimum standards of sanitation and hygiene in Tourist Camps for the coming season.

Owing to the shortage of materials and manpower it was difficult for Councils to implement these suggestions although a large number of Councils replied to this office saying that they fully agreed with the suggestions as set out.

Legislation.

The need for constant revision of the various Health Acts and Regulations has become evident. The phrasing and meaning in many cases are most obscure, and recent advances in public health would suggest the need for additional legislative safeguards for the community.

Legal Proceedings.

One case under the provisions of the Noxious Trades Act, 1902, was undertaken against a licensed pig-keeper for feeding

to pigs putrescible matter which had not been boiled for one hour. The trader was convicted, fined £5 with costs 12s. and witnesses expenses £2 11s. 6d.

Pure Food Act, 1908, Regulation 77. Four informations were laid against four persons under Regulation 77, clause 26 (2), for handling a sticky substance with the fingers. Convictions were obtained at the Court of Petty Sessions in two cases—each being fined £1 with 8s. costs. The remaining two cases were adjourned pending the hearing of an appeal against the two decided cases.

At the District Court the appeals were upheld by Judge Neild on the grounds that there was no specific evidence that the sticky portion of the articles (iced cake and tea-cake) had been actually touched by the fingers.

Subsequently the other two cases were withdrawn.

I once again desire to take the opportunity of placing on record my appreciation of the loyal and efficient services of Mr. Senior Inspector K. R. Horne and Miss O. Thompson.

MITCHELL HEALTH DISTRICT, BATHURST.

Report of the Medical Officer of Health for the year ended 31st December, 1947.

A. J. Geoffroy, M.B., Ch.M., D.P.H., D.T.M., D.T.H.

The Mitchell Health District, with Headquarters at Bathurst, was formally opened on 1st December, 1947. The Medical Officer of Health was appointed and commenced duty on 27th July, 1947.

Offices were obtained in Webb's Chambers, •175A George-street, Bathurst.

Mr. D. H. Way was appointed Senior Health Inspector attached to the Mitchell Health District and took up his appointment on November 17th, 1947.

Vital Statistics, 1947.

Population.—The population of the district at 31st December, 1947, was estimated at 115,220, while the estimated mean population for 1947 was 114,770.

Marriages.—During 1947, 892 marriages were celebrated in the district, equal to a rate of 7.77 per 1,000 of mean population.

Live Births.—There were 2,806 live births to mothers resident in the district, equivalent to a rate of 24.45 per 1,000 of mean population. Of these, 1,441 were males and 1,365 females.

Ex-nuptial Live Births.—These numbered 115, equivalent to a rate of 1.00 per 1,000 of mean population. The ex-nuptial live births represented 4.10 per cent. of the total live births.

Deaths.—The deaths of residents numbered 1,149, equivalent to a rate of 10.01 per 1,000 of mean population. Of these, 666 were males, and 483 females.

Infantile Mortality.—Deaths under one year of age numbered 110, equal to a rate of 39.20 per 1,000 live births.

Stillbirths.—There were fifty-six stillbirths to mothers resident in the district, equal to a rate of 0.49 per 1,000 of mean population, and representing 1.96 per cent. of all births (live and still).

MITCHELL HEALTH DISTRICT.

Marriages, Live Births, Stillbirths and Deaths—Each Local Government Area, 1947.

District.	Area 31st December, 1947.	Estimated Population.		Mar- riages.	Live Births.						*Deaths.						Stillbirths.						
		31st Decem- ber, 1947.	Mean 1947.		Total.			Ex-nuptial.			All Ages.			Under 1 year.			Total.			Ex- nuptial.			
					M.	F.	Total.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	
Municipalities—	(Acres.)																						
Bathurst	2,990	11,910	11,820	154	172	165	337	8	5	13	74	52	126	7	3	10	3	7	10	...	...	...	
Blue Mountains ...	344,698	21,370	21,020	123	231	191	422	10	11	21	119	120	239	7	6	13	6	4	10	2	...	2	
Lithgow	5,095	14,520	14,440	162	220	163	383	6	2	8	70	43	113	7	5	12	5	4	9	1	...	1	
Molong	6,374	1,670	1,660	16	18	24	42	...	1	1	7	7	14	1	...	1	...	2	2	...	...	...	
Mudgee	802	4,190	4,180	62	68	38	106	3	...	3	36	23	59	3	3	6	...	1	1	...	...	...	
Orange	1,977	13,840	13,610	227	173	221	394	10	10	20	63	64	127	3	11	14	4	6	10	...	...	...	
Shires—																							
Abercombie	576,905	3,910	3,920	11	48	44	92	3	1	4	30	15	45	6	2	8	...	...	...	...	...	...	
Amaroo	494,080	2,240	2,280	6	24	41	65	1	1	2	9	6	15	2	1	3	2	...	2	...	...	...	
Blaxiand	854,820	9,330	9,290	27	126	109	235	6	7	13	47	38	85	7	4	11	...	...	...	...	...	...	
Canobolas	414,748	7,570	7,630	1	94	78	172	3	7	10	53	34	87	8	2	10	1	3	4	...	...	...	
Cudgegong	862,080	4,230	4,310	3	47	39	86	2	...	2	26	16	42	1	...	1	1	...	1	...	...	...	
Gulgong	469,942	3,320	3,360	19	45	43	88	2	1	3	25	9	34	5	...	5	1	...	1	...	...	...	
Lyndhurst	399,039	6,080	6,140	32	55	74	129	3	4	7	42	21	63	2	3	5	2	...	2	...	...	...	
Oberon	722,983	3,230	3,210	19	36	46	82	...	1	1	12	8	20	1	...	1	1	...	1	...	...	...	
Rylstone	945,920	4,350	4,400	21	46	52	98	2	3	5	31	15	46	7	2	9	2	...	2	...	...	...	
Turon	574,667	3,460	3,500	9	38	37	75	2	...	2	22	12	34	1	...	1	...	1	1	...	...	...	
Mitchell Health District	6,677,120	115,220	114,770	892	1,441	1,365	2,806	61	54	115	666	483	1,149	68	42	110	28	28	56	3	...	3	

* Figures for under one month and under one week not available.

General.

The period 27th July to 30th November, 1947, was employed in general office work preparatory to the formal opening of the District on 1st December, 1947.

During that period, the following Municipal and Shire Councils were visited with a view to familiarising those Councils with the work of the Department of Health in relation to their Local Government areas, and also with the scope of the duties of the Medical Officer of Health and Senior Health Inspector.

Municipalities of—

- Bathurst.
- Orange.
- Lithgow.
- Blackheath.
- Katoomba.
- Molong.

Shires of—

- Abererombie.
- Turon.
- Lyndhurst.
- Blue Mountains.
- Blaxland.
- Rylstone.
- Canobolas.
- Oberon.

During that period the following inspections were carried out:—

Bathurst—

- Sewage Treatment Works.
- Sanitary and Garbage Depots.
- Effluent from Gasworks.
- House Inspection (2).

Bathurst—continued.

- Soap Works—Pure Foods Act.
- Western Stores—Pure Foods Act.
- Flour Mills—Pure Foods Acts.
- Edgells Ltd.

Orange—

- Sewage Treatment Works.
- Sanitary Depot.
- Garbage Depots (two).
- Saleyards.
- Septic Tank Site.

Lithgow—

- Sewage Treatment Works.
- Complaint re Guest Houses, Littleton and Bowen-fels.

Lyndhurst—

- Sanitary Depot (two).
- Garbage Depot (three).

Blue Mountains—

- Swimming Pools at Lawson, Wentworth Falls and Blackheath.
- Septic Tank Sites at Springwood and Leura.

Rylstone—

- Scavenging Area.
- Hotels at Kandos (two).

Gulgong—

- Sanitary and Garbage Depots.
- Wheat Silos, Birriwa.
- Complaint re Health Inspector.

Mudgee—

- Complaints (two) re Keeping of Dogs and Poultry.

Infectious Diseases.

There was an outbreak of Infantile Diarrhoea amongst the new-born in the Bathurst General Hospital in November, 1947. This office was notified on 13th November, 1947, that there had been fifteen cases of infectious Diarrhoea during the previous fortnight.

Measures were taken to control the infection, following a conference with the Medical Practitioners of Bathurst, though the causative agent of the epidemic was not determined, this office is pleased to report that no further case of Diarrhoea occurred after the initiation of control measures.

RICHMOND-TWEED HEALTH DISTRICT.

Annual Report for the year ended 31st December, 1947.

The Richmond-Tweed Health District was established on the 18th July, 1947, and the supervision of health administration of local authorities by the staff of this office came into operation on the 1st December, 1947, when correspondence, reports, applications for statutory approvals, etc., were forwarded by local authorities to this office to be dealt with instead of direct to the Department in Sydney.

The office is staffed with the Medical Officer of Health—Dr. J. J. Donnellan, M.B., Ch.M., D.P.H., a Senior Health Inspector—Mr. R. C. Turner, A.R.San.I. (Lond.), M.I.H.S. (Aust.), Office Assistant—Miss P. M. Grennan.

Natural Topographic and Social Conditions of the District.

The district extends from South Grafton in the south to the Queensland Border in the north, westward to the western boundaries of the Copmanhurst Shire and Kyogle Shire and the coastal areas from Yamba in the south to Tweed Heads in the north.

It embraces two cities, six municipalities, and ten shires—population, 115,983. Area, 5,254 square miles.

The area is a primary producing one comprising the rich farming lands of the Tweed, Richmond and the Clarence. The rural industries are mainly dairying, cattle and pig raising, banana growing, sugar cane growing, and timber getting in the mountainous areas at the heads of the three rivers. A feature of the topography of the district is the rich undulating country between the rivers, which shows marked fertility to the tops of the slopes. Tropical fruits such as pine-apples, paw paws, etc., are grown in the area.

There are several popular tourist resorts along the coast—Yamba, Evans Head, Ballina, Lennox Heads, Broken Heads, Byron Bay, Brunswick Heads, Cudgera, and Tweed Heads—which attract a large tourist population during the tourist season from all parts of the State, but largely from the New England and western inland areas.

Notifications—December, 1947.

Municipality of—	Cerebro Spinal Meningitis.	Diphtheria.	Scarlet Fever.
Bathurst	1	...	...
Orange	...	1	...
Lithgow	...	...	1
Blue Mountains	...	...	2
Total Cases—			
C.S. Meningitis	1	...	...
Diphtheria	1	...	...
Scarlet Fever	3	...	...
Total	5		

Fumigation.—Six applications for fumigating premises under Public Health Act, Part VIIA were received and approved.

Septic Tank Sites—Inspection of.

1947.	Blue Mountains.	Canobolas.	Mo-long.	Total.
July to November 30th	1	1	...	2
December 1st—31st	4	...	1	5
				7

During period July-December, 1947, advice re Sanitation, Septic Tanks, etc., was given to enquirers at this office.

Comment.

Inspection of Sanitary Depots in this Health District shows that there has been a lack of general supervision and knowledge of the principles of sanitation in some districts. This may in part be due to the fact that in some districts, there is no Council Health Inspector, the Health work being supervised by Council Engineer or Town Clerk, whilst in others the amount of health work to be done is performed by inadequate staff.

It may be said, however, that Sanitation and Health have been improved satisfactorily since the establishment of this Health District.

The thanks of this office is tendered to the officers and staff of the Public Works Department for help given in the establishment of this office, and also to the co-operative measures of the various Councils and their Officers within the district.

The district is regarded as the closest settled rural area in Australia. The high fertility of the soil enables numbers of small farmers, banana growers, etc., to obtain a good living from a limited area of land.

The social conditions, therefore, generally are good.

The City of Lismore carries the largest population and is regarded as the distributing centre of the Far North Coast. It is served by rail direct from Sydney, but the main bulk of manufactured goods and raw materials are brought to the City by boat, the wharf, being in the centre of the town at which coastal steamers arrive, sailing 75 miles up the river from its mouth at Ballina.

Grafton, another centre having large shopping population, is served by coastal steamers on the Clarence River, the mouth of which is at Yamba.

The populated area south of the river at Grafton is a separate municipality known as South Grafton. Its interests appear to be identical with those of the City of Grafton.

There is also some water transport on the Tweed River at Murwillumbah, but coastal steamers from the south do not ply there direct.

Casino is also an important centre of population being the rail junction for the main line Casino to South Brisbane and Casino to Murwillumbah.

Other towns are—

Mullumbimby, about half way between Lismore and Murwillumbah, centre of a large banana growing district.

Ballina, at the mouth of the Richmond River, a tourist centre.

Byron Bay a tourist centre and port for shipment of timber, etc., for the district.

Macleon on the Lower Clarence, Kyogle the administrative centre for the Kyogle Shire, a rich farming and timber district, and Ulmarra, which is a large rural area resembling a shire, with its scattered population.

Bangalow is a small town 20 miles north of Lismore and Coraki and Woodburn also smaller towns on the Richmond south of Lismore.

Alstonville on the Lismore-Ballina road is the headquarters of the Tintenbar Shire.

Tweed Heads on the Queensland Border is a popular tourist centre.

Vital Statistics, 1947.

Population.—The population of the district at 31st December, 1947, was estimated at 113,020, while the estimated mean population for 1947 was 112,290.

Marriages.—During 1947, 1,168 marriages were celebrated in the district equal to a rate of 10.40 per 1,000 of mean population.

Live Births.—There were 3,233 live births to mothers resident in the district equivalent to a rate of 28.79 per 1,000 of mean population. Of these, 1,636 were males, and 1,597 females.

Ex-nuptial Live Births.—These numbered 132, equivalent to a rate of 1.18 per 1,000 of mean population. The ex-nuptial live births represented 4.08 per cent. of the total live births.

Deaths.—The deaths of residents numbered 864, equivalent to a rate of 7.69 per 1,000 of mean population. Of these, 494 were males, and 370 females.

Infantile Mortality.—Deaths under one year of age numbered 118, equal to a rate of 36.50 per 1,000 live births.

Stillbirths.—There were seventy stillbirths to mothers resident in the district, equal to a rate of 0.62 per 1,000 of mean population, and representing 2.12 per cent. of all births (live and still).

RICHMOND-TWEED HEALTH DISTRICT.
Marriages, Live Births, Stillbirths and Deaths—Local Government Areas, 1947.

Dlstrct.	Area 31st December, 1947.	Estimated Population.		Mar- riages.	Live Blrths.						*Deaths.						Stillblrths.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
		31st Decem- ber, 1947.	Mean 1947.		Total.			Ex-nuptial.			All Ages.			Under 1 year.			Total.			Ex- nuptial.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
					M.	F.	Total.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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* Figures for under one month and under one week not available.

The work of this office only commenced on the 1st December, 1947. The time since then has been occupied in establishing the office and in meeting officers of the Local Authorities and discussing various aspects of public health administration with them.

During the month four cases of Infectious Diseases were reported to this office as follows:—

Typhus Fever	1
Typhoid Fever	1
Scarlet Fever	1
Diphtheria	1

BROKEN HILL AND DISTRICT.

Report of Medical Officer of Health (J. T. Cullen, M.B., B.S.),
for the Year Ended 31st December, 1947.

The population of Broken Hill Municipal District at 31st December, 1947, was estimated at 27,400, which represents a decrease of 200 when compared with that of the previous year.

The deaths for the period under review numbered 286 (males, 171; females, 115). There were 792 births for the twelve months, comprising 402 males and 390 females.

Infectious Diseases.

The monthly incidence of notifiable infectious diseases was as follows:—

	Typhoid Fever.	Scarlet Fever.	Diph- theria.	Meningo- coccal Meningitis.	Puerperal Infection.	Infantile Paralysis.
January	2	1	...	...	...	...
February	...	2	...	...	...	...
March	...	4	...	...	...	...
April	...	3	1	...	...	...
May	...	8	1	...	...	...
June	...	3	...	1	3	...
July	...	4	2	...	...	...
August	...	3	1	...	...	...
September ...	...	8	...	...	...	...
October	...	3	...	...	...	...
November	...	5	...	...	...	...
December	...	3	1	...	...	...
Totals	2	47	6	1	3	N I L

It is noteworthy that the only notifiable infectious disease of any frequency was scarlet fever, and that only six cases of diphtheria were reported for the period under review.

The incidence of notifiable infectious diseases at Broken Hill during the past five years is shown in the following table.

Disease.	1943.	1944.	1945.	1946.	1947.
Typhoid and Paratyphoid	2	...	2	...	2
Scarlet Fever	90	63 (1 N.I.).	44	27 (1 N.I.).	47
Diphtheria	18	9	34	91 (1 N.I.).	6
Meningococcal Meningitis	3	...	1	1	1
Infantile Paralysis	...	...	...	3	...

The aboriginal station at Menindee was visited as usual, two visits being made during the period under review. The general state of health of the inhabitants was good. There was freedom from infectious diseases, and in particular from tuberculosis.

At the Anti-tuberculosis Clinic 83 new cases were investigated, and the total number of attendances at the Clinic during the period under review was 784, an increase of 92 when compared with those of the previous twelve months.

The State Laboratory conducted 1,140 examinations during the period 1st January to 12th February, 1947, when this Laboratory was handed over, together with its equipment, to the control of the Broken Hill and District Hospital. Details of the above examinations are as follow, totals for the previous twelve months are given in parenthesis.

Total number of examinations	1,140	(11,752)
Biochemical tests	345	(2,789)
Bacteriological examinations	308	(3,856)
Haematological examinations	429	(4,635)
Histopathological examinations	16	(150)
Serological specimens sent to Sydney	42	(302)

SECTION III.
STATE HOSPITALS AND HOMES.

STRICKLAND CONVALESCENT HOSPITAL.
Annual Report for 1947.

Visiting Emergency Medical Officer.—Dr. R. C. Traill.
Matron.—Miss Angus.
Acting Matron.—Mrs. Aldred.
Clerical Staff.—Mr. D. W. A. McHarg.
Trained Nurses.—Four.
Experienced Nurses.—Two.
Female House Staff.—Six.
Outdoor Attendant.—One.
Night Attendant.—One.
Attendant Cleaner.—One.
Patients' Bed Accommodation : Males, 40; Females, 70; Inmate Workers, 21.
Remaining in Hospital, 31st December, 1946 : Males, 20; Females, 44;
Inmate Workers, 16.

	Male.	Female.	Total.
Patients admitted during 1947	217	576	793
Patients discharged during 1947	218	576	794
Patients deceased	1	Nil	1
Remaining in Hospital 31st December, 1947	18	44	62

And 17 Inmate Workers.

Daily Average : Male, 21; Female, 43; Inmate Workers, 17.

Maintenance and Donations for the Year
Amounted to £1,470.

At this Institution, patients are received from Metropolitan Hospitals, Hospital Admission Depot, and a number from Country Hospitals. The majority of patients are very well satisfied and appreciate the care and attention given them.

On discharge they show marked gain in weight and general health. This is very evident at present, as hospitals discharge their patients in a very weak condition due to overcrowding of beds.

A number of patients are in plaster and have to visit the out-patients' department at various hospitals—some daily. A small number also receive deep-ray treatment.

A very small percentage have to be returned to hospital for further treatment.

General maintenance for the year has been carried out by the Public Works Department and local labour.

PARTICULARS OF EXPENDITURE INCURRED BY OTHER DEPARTMENTS
FOR THE YEAR ENDED 31st DECEMBER., 1947.

	£	s.	d.
Stationery and Office Requisites	1	11	3
Furniture	66	5	0
Clothing and Drapery	102	18	8
Hardware, Ironmongery and General Stores	160	18	0
Electricity	196	1	6
Gas	50	10	3
Sewerage.....	11	12	6
Telephone	64	2	3
	£653	19	5

EXCHANGE ACCOUNT.

Lideombe Relieving Attendant's Salary	130	5	6
Lidcombe Lorry Charges	21	3	6
Newington Laundry Account	129	7	9
	£280	16	9

SALES EX CARRARA.

	£	s.	d.
Sale of Bottles	0	19	3
Value of Stock on hand as at 31st December, 1947...	£751	0	2

LIDCOMBE STATE HOSPITAL AND HOME.

Report of Medical Superintendent for the Year Ending
31st December, 1947.
Honorary Visiting Staff.

Hon. Staff Surgeon, H. C. Rutherford Darling, L.R.C.P. (London), M.R.C.S. (England), F.R.C.S. (England), M.B., B.S., M.D., M.S. (London), L.F.P.S. (Glasgow); Assistant Hon. Surgeon, J. A. Lawson, M.B., Ch.M., F.R.A.C.S.; Hon. Ophthalmic Surgeons, A. E. Fraser Chaffer, M.B., Ch.M., F. J. A. Pockley, M.B., B.S., C. E. H. Beckett, M.B.; Hon. Urologist, C. M. Edwards, M.B., Ch.M.; Assistant Urologist, H. G. Cummine, M.B., B.S. & M.S.; Hon. Dermatologist, R. J. Nowland, M.B., B.S.; Ear, Nose and Throat Surgeon, R. E. Dunn, M.B., B.S., B.Sc.; Radiologist, Colin R. Cole, M.B., Ch.M.; Dentist, D. G. Brown.

Staff—Administrative.

Medical Superintendent, E. J. Brooks, M.B., Ch.M.; Deputy Superintendent, G. S. Procopis, M.B., M.R.A.C.P.; Senior Medical Officer, N. C. Wright, L.R.C.P., L.R.C.S. (Edinburgh), L.R.F.P.S. (Glasgow), M.R.C.P. (Edin.); Junior Medical Officers, P. B. Hagen, M.B., B.S.; W. T. Lesslie, M.B., Ch.D.; W. A. Moylan, M.B., B.S.

Manager.—S. J. Warner.

Acting Matron.—Miss A. J. Carr.

Nurses.—39.

Other Female Staff.—16

Attendants.—167.

Other Male Staff.—48.

By the appointment of Mr. C. V. Jerrett, Assistant X-ray Technician, the X-ray Department is now in operation for five days per week.

Number of beds available: 842 hospital, 649 dormitories; total, 1,491.

Daily average number of patients and inmates residents.—1946, 1,201; 1947, 1,137.

Admissions—Discharges:—

	Hospital Division.	General Division.	Infection Division.	Total.
In Institution 1st January, 1947	672	447	...	1,119
Admissions	1,017	1,340	...	2,357
Transfer from Yard and other Sections	307	198	...	505
	1,996	1,985	...	3,981
Discharges	643	1,214	...	1,857
Deaths	522	6	...	528
Transfers to other Sections.....	199	307	...	506
	1,364	1,527	...	2,891
In Institution 31st December, 1947.....	632	458	...	1,090

Daily average numbers in residence during the year:—

Hospital Division, 673. General Division, 464. Total, 1,137.

Casual Relief.—One hundred and eight indigent persons were provided with sleeping accommodation for one night; 181 were supplied with a meal.

Total cost of maintenance and treatment, £145,087 11s. 9d.

Average annual cost per patient or inmate, £127 12s. 1d.

During the year 116 major operations were performed. Two thousand, eight hundred and thirty-nine cases were examined in the X-ray Department. Two thousand, nine hundred and seven-four specimens were examined in the Pathological Department.

Laundry: 1,153,375 articles were laundered.

Farm: 37,505 lb. of vegetables were produced.

Sale of Pigs, etc.: realised £1,289 4s. 3d.

In the Bakehouse, 853,244 lb. bread and cake were produced at an average cost of 1.636d.

The following works were carried out by the Department of Public Works during the year:—

New Buildings.—New bathroom for inmates in Yard Section.

Miscellaneous:

1. Internal painting in Hospital Wards—Main Section.
2. Internal and External painting—Junior Medical Officers' Residence.
3. Additional room in Deputy Medical Superintendent Residence.
4. Lavatory and showers for Attendant Staff Mess Room.
5. Incinerator in Yard Section.
6. Concrete ramp at Church Hall.
7. Installation of Kosi Stoves in Ward 29.
8. Remodelling of Projector Room at Concert Hall.
9. Installation of Blanket and Flannel Washing Machine at Laundry.

Recreation for Inmates.—The Bowling Green which has been thoroughly renovated is now being used for the recreation of inmates and the thanks of the administration is given to the many bowling clubs in the metropolitan area for their

interest in the club at the institution. Concerts and other entertainments have been given by various organisations at frequent intervals during the year and donations in cash and kind have also been provided for the comfort of the patients and inmates. The thanks of the administration is given to all concerned.

The dairy herd of Friesian cattle was disposed of by sale and transfer to the Department of Agriculture during the year.

The piggery has been improved by the addition of new stock transferred from other institutions.

Recreation for Staff.—A concrete cricket pitch was constructed for use by inmates and staff during the year.

A staff cricket club was formed and several enjoyable matches were played.

Expenditure 1947		£	s.	d.
Salaries and Payments in the nature of Salaries	84,891	16	10	
Postal and Telegraphic Services	599	3	9	
Workers' Compensation Premiums	737	9	2	
Gratuities to Inmates	4,558	17	2	
Provisions	37,303	9	2	
Drugs, Dressings and Surgical Appliances	5,751	11	2	
Fuel, Light.....	5,306	1	2	
Forage.....	2,232	18	8	
Materials for Minor Repairs	1,538	14	0	
Additions and Renewals to Buildings and Plant	15,406	5	1	
Transport Expenditure, including Freight and Cartage	1,771	15	2	
Clothing and Drapery	7,727	10	6	
Hardware, Ironmongery and General Stores ...	1,670	0	7	
Furniture	1,584	18	0	
Office Expenses	155	14	4	
Farm and General Requisites.....	234	12	0	
Sundry Expenses	1,174	14	3	
	172,645	11	0	
Plus stock on hand 1st Jan., 1947	12,298	8	9	
Exchange A/c. Debits, 1947	190	7	4	
	12,488	16	1	
	185,134	7	1	
Less Stock on hand 31st Dec., 1947	19,045	3	11	
„ Exchange A/c. Credits 1947...	3,897	10	8	
	22,942	14	7	
	162,191	12	6	
Less Revenue Collected at Instn....	5,710	18	2	
„ Pensioners' Maintenance for year	11,393	2	7	
	17,104	0	9	
	£145,087	11	9	

Average daily number resident for year, 1,137.
Average cost per head, £127 12s. 1d.
NOTE.—In addition to the amount of £17,104 0s. 9d. shown as Revenue Collected, claims were lodged against the Federal Government under the free hospital service, for the year, showing 244,081 bed days at 6s. per day = £73,224 6s. 0d.

LIVERPOOL STATE HOSPITAL AND HOME.
Report of Medical Superintendent for Year Ended 31st December, 1947.
Honorary Visiting Staff.
Consulting Surgeon: B. T. Edye, F.R.C.S.; *Surgeon:* L. D. Miller, M.B., F.R.C.S.; *Assistant Surgeons:* A. L. Webb, M.B., F.R.C.S., J. A. Lawson, M.B., F.R.C.S., J. A. Manion, M.B., Ch.M.; *Anaesthetist:* A. Rose Innes, L.R.C.P. (London), M.R.C.S. (Eng.); *Ear, Nose and Throat Surgeon:* H. Eisenberg, M.B., B.S.; *Dermatologist:* W. A. McDonald, B.A., M.B., Ch.M.; *Urologist:* R. T. Campbell, M.B., Ch.M.; *Neuro-Surgeon:* J. R. Tripp, M.B., B.S.
Staff.
Whilst staffing difficulties still persisted throughout the year the employment of additional male staff for ward duties, in vacant nursing posts, obviated the necessity of effecting reduction in the number of hospital beds though Operating Theatre activities were of necessity restricted to emergency cases only during the final six months of the year.
Details of staff actually employed as at 31st December, 1947, are as follow, viz.:—
Medical Superintendent: C. R. O'Brien, M.B., Ch.M.
Medical Officer: J. J. L. McDonald, L.R.C.P.
Manager: E. C. Barrett.
Matron: L. W. McIntosh.

Acting Sub-Matron, Dispenser, 2 Clerks, 4 Office Assistants, 2 Storekeepers, 13 Nurses, Chief Attendant, Deputy Chief Attendant, 33 Attendants, 26 other Male Staff, 10 Female Staff. In addition, a part-time Medical Practitioner attended the 'Out-Patients' Department three days per week throughout the year whilst a Dental Surgeon visited the institution at fortnightly intervals.

Number of Beds and Wards.
Hospital Division, 11 Wards previously containing with annexes, 302 beds reduced to 287 beds as now available though this figure includes 1 ward 28 beds at present not in use in consequence of nursing staff shortage. Dormitory accommodation for inmates of the Home Section remained at 444 beds throughout the year.

Admissions and Discharges.
In residence 1st January, 1947, 676. Admitted during year, 2,388. Discharged, 2019. Died, 378. Total remaining at 31st December, 1947, 667. Average daily number resident, 672.23. Average cost per occupied bed, £117 3s. 6d.

SUMMARY OF WARD PATIENTS TREATED DURING 1947.					
Section.	In Hospital, 1st January, 1947.	Admitted during Year.	Discharged during Year.	Died.	In Hospital, 31st December, 1947.
Cancer Ward	57	153	48	108	59
General Wards	169	324	121	201	171
Total	226	482	169	309	230
District Ward	21	560	514	46	21
Grand Total ...	247	1,042	683	355	251

Out-patients' Department.
Twenty thousand, four hundred and forty-two attendances were recorded during the year which includes 3,841 individual attendances.

Operations.
A total of seventy-eight operations were performed during the year of which number nineteen could be classified as major operations.

Review of Work.
Buildings.—It is pleasing to report that the construction of a new Recreation Hall for inmates, commenced in 1946, was completed towards the end of 1947 and with the anticipated early installation of Esse Stoves and completion of minor work in the Library section the building should shortly be available for use. With the very satisfactory lighting facilities installed and furnishings in tubular steel to be provided, a measure of comfort for our inmates not hitherto enjoyed by them will then have been attained.

During the year also, concreting around the entire Out-Patients' Department building—aimed at diverting rainwater away from the foundations and to so obviate any further subsidence—was carried out but interior renovation of this building is still an outstanding work.

Repairs to and renewal of the park-rail fencing surrounding the Cancer Block were effected late in the year and a commencement was made early in September with the important work of erecting a new Night Workers' Dormitory. In November, too, some general exterior painting was undertaken of buildings comprising the Main Hospital Block and this work was still in progress at the close of the year.

Work in connection with the erection of a new Yard Lavatory and Barber's Shop, commenced in 1946, has not proceeded beyond the foundation stage as deferment of one, at least, of these projects has been necessitated by a proposed acquisition of certain institutional property for railway purposes—a matter not as yet finally determined.

Services.—The services of the institution generally have been satisfactorily maintained throughout the year, an improvement in the steam raising plant being effected consequent upon the overhaul and re-bricking of the two main boilers during the period under review.

Renewal of the water service pipes to the residences of the Manager and Medical Officer was carried out by the Department of Public Works during the month of October as was also the linking-up of the Nurses' Home with the main sewer pipe line connected to the Water and Sewerage Board's new Sewage Treatment Plant.

A pressing need, however, exists for the provision of a new Main Kitchen, Mess Room and Laundry each with modern facilities and equipment and the hope is expressed that it will be possible to effect these essential provisions during the current year.

Entertainments.—As in past years frequent concerts and variety entertainments were provided during 1947 by organisations and individual parties and the fortnightly Cinema entertainment continued to be well patronised and much enjoyed by the inmates.

To all members of organisations who have so contributed in providing pleasure for our inmates, our grateful thanks are tendered and in this regard it is desired to make special mention of the Smith Family, who during the year, as previously, in addition to providing high class entertainments on a number of occasions also distributed gifts of cake, sweets, fruit and pipes to inmates.

Farm—Dairy and Piggery.—Restoration of farm lands, buildings and services to their pre-Army occupation condition proceeded very slowly during the year and it appears likely that a very considerable period will elapse before such restoration is fully accomplished.

Boundary fences were, however, re-erected during the year and certain internal fencing within the piggery section also received attention.

Upon completion of all essential work within this section, recommencement of pig-raising activities is proposed.

Gardens and Grounds.—Notwithstanding the handicaps imposed by damaging thunderstorms which occurred on two occasions during the first quarter of the year, the exceptional rainfall during November and December and the lack of adequate labour, production in the vegetable garden increased during 1947 in comparison with the previous year, a total yield of 57,650 lb., embracing fourteen varieties of vegetables, being secured.

In respect of flower gardening activities and ground maintenance work, much improvement could be effected with the appointment of a staff gardener and satisfactory supporting labour. The matter, particularly of a proper lay-out of the grounds surrounding the Cancer Division and their adequate maintenance, constitutes under present operations, a task of Herculean proportions which, it is felt, can only be undertaken and satisfactorily accomplished when the appointment referred to is effected.

NEWINGTON STATE HOSPITAL.

Annual Report for Year ended 31st December, 1947.

Hon. Medical Staff.

Neurologist.—Vacant.
Ophthalmic Surgeon.—Vacant.

Staff.

Medical Superintendent.—J. McManamey, M.B., B.S. (Sydney).
Medical Officer.—Miss Lottie Sharfstein, M.B., Ch.M.
Manager.—Mr. L. R. McKell.
Acting Matron.—Miss P. H. McGregor.
Staff Nurses.—63. Dispenser.—1. Senior Clerk.—1. Junior Clerk.—1. Female Clerical Assistants.—3. Storekeeper.—1. Other Female Staff.—23. Male Staff.—17.

A dentist visits the Institution fortnightly.

Admissions and Discharges.

Inmates in hospital on 1st January, 1947, 480. Admissions during year, 627. Discharges, 588. Died, 60. Remaining in Institution at 31st December, 1947, 459. Average daily number, 476.

Hospital Division Statistics.

Beds available	334
In Hospital at 1.1.47	291
Admissions during year	86
Discharges during year	47
Died during year	60
In Hospital at 31.12.47	270

Expenditure.

The expenditure for the year was £57,878 10s. 3d. Annual cost per occupied bed, £121 11s. 10d. Revenue collections (sales), £409 11s. 1d.

RANDWICK AUXILIARY HOSPITAL.

Report for the Year Ended 31st December, 1947.

Following are the statistics summarising the work of the hospital during the twelve months ended 31.12.47:—

	Males.	Females.	Total.
Indoor Patients—			
Patients under treatment on 31st December, 1946.....			
Admitted during 1947	49	68	117
	61	42	103
Total treated during 1947			
	110	110	220
Died during 1947			
Discharged during 1947	38	26	64
	26	25	51
Total died and discharged, 1947			
	64	51	115
Remaining in hospital on 31st December, 1947			
	46	59	105
Daily average number of resident patients,...			
Average residence of discharged and deceased patients in days	46	61	107
Number of individuals who received out-door treatment	294	374	329
Total number of visits made by out-door patients	...	...	75
	...	...	1,036

Working Inmates—	
In Institution on 31st December, 1946	12
Admitted during 1947	21
Total	
Discharged during the year 1947	33
	22
Daily average number	
	11
General daily average number including workers	
	118

Operations Performed—	
Thoracoplasty	33
Phrenic Crush	57
Thoracoscopy and Oleothorax	3
Bronchoscopy	78
Abdominal and Pelvic	2
Mastoidectomy	1
	174
Minor Operations	6
Total	
	180

X-Ray Department—	
X-ray Examinations	1,627
Barium	19
Screenings	724
Films used	1,787
Dental Films used	156
Randwick Auxiliary Hospital—Standard Establishment	
Honorary Staff—	
Honorary—	
Ear, Nose and Throat Surgeon	2
Urologist	1
Thoracic Surgeons	2
Dermatologist	1
Orthopaedic Surgeon	1
General Surgeon	1
Consulting Physician	1
Anaesthetist	3
	12

Medical and Clerical—	
Medical Superintendent	1
Medical Officer	1
Junior Medical Officers	2
Manager	1
Clerks (Male)	2
Office Assistant	1
	8

Nursing—	
Matron	1
Sub-Matron	1
Theatre Nurse	1
Nurses (Female)	66
Nurses (Male)	13
Nurses (Male) pending shortage of nurses	6
	88

Domestic Staff—	
Wardmaids and Housemaids	34
Kitchenmaids	2
Kitchenmaid Cook	1
Cooks	3
Kitchenmen	2
Seamstress	1
	43

Randwick Auxiliary Hospital—Standard Establishment.—*continued*

Miscellaneous—

Outdoor Attendants—Cleaning in Wards	5	
Maintenance of Grounds, etc.....	5	
Steam Raising Plant	3	
Store	1	
Occupational Therapy	1	
Dispenser—(Female)	1	
Dietitian—(Female)	1	
	17	
Total staff, full time, authorised for 202 patients, representing the maximum number yet under treatment.....	167	

Part-time Employees—

Nursing Staff	5	
Domestic	5	
	10	

Visiting Staff—

Radiologist	1	
X-ray Technician	1	
Clergymen	2	
	4	

Total 172

Shortages on 31st December, 1947—

Nursing Staff	39
Domestic Staff	13
Dietitian	1
Dispenser	1
Occupational Therapist	1

Throughout the year, staff shortages were again very acute and the number of patients fell still further from 117, on 1st January, 1947, to 105 on 31st December, 1947.

The maximum number of patients under treatment in the Institution was during 1942, when the daily average number of patients was 200.2.

The decline in the number of patients under treatment as a consequence of shortage of staff illustrated by the following statement:—

DAILY AVERAGE NUMBER OF PATIENTS.

1942	200.2
1943	194
1944	185
1945	152.69
1946	123.9
1947	107

ANNUAL REPORT OF THE WATERFALL SANITORIUM
AS AT 31st DECEMBER, 1947.

1. (a) Number of beds available on 31st December, 1947—

	Male.	Female.	Total.
Patients	292	176	468
Working Inmates	129	19	148

(b) Remaining in hospital on 31st

	Patients.	Workers.	Total.
December, 1946.....	229	134	363
Admitted during 1947	85	674	759
Total treated during 1947	314	808	1,122
Number discharged	94	688	782
Number died	52	...	52
Remaining in hospital on 31st December, 1947	168	120	288

Average daily number resident ... 208 125 333

Average residence of discharged patients in days..... 608

Total cost of maintenance and treatment of £ s. d.

Indoor Patients 61,484 19 6

Average daily number of inmates resident 333

Average cost per inmate p.a. £ s. d.

Average daily number of patients resident 208

Average cost per patient p.a. £ s. d.

(c) Outpatients of individuals who received treatment ... 52

Total number of attendances 64

2. Staff as at 31st December, 1947—

	Posts.	Filled.
Honorary Medical Staff	2	2
Medical Staff	5	5
Managerial and Clerical	3	3
Nursing Staff Female	49	14
Nursing Staff Attendants	23*	13
Male Outdoor Staff	28	22
Female Outdoor Staff	14	5

* Includes 6 Attendants in lieu of Nurses.

DAVID BERRY HOSPITAL.

Report for the Year Ended 31st December, 1947.

Following are the statistics summarising the work of the hospital during the twelve months ended 31st December, 1947:—

Indoor Patients—	Males.	Females.	Total.
Patients under treatment on 31st December, 1946	2	3	5
Admitted during 1947	249	220	469
Births during 1947	7	1	8
Total treated during 1947	258	224	482
Died during 1947	12	10	22
Discharged during 1947	239	208	447
Total died and discharged, 1947...	251	218	469
Remaining in hospital on 31st December, 1947	7	6	13
Daily average number of resident patients	7	6	13
Average residence of discharged and deceased patients in days	13	9	22
Number of individuals who received out-door treatment	...	...	200
Total number of visits made by out-door patients	...	...	329

Working Inmates—

In Institution on 31st December, 1946	2
Admitted during 1947	...
Total	2
Discharged during 1947	...
Remaining in Institution on 31st December, 1947...	2
Daily average number	2
General average daily number including workers ...	15

Operations Performed—

Head, face, sinus, E.N.T.	33
Abdominal	68
Orthopaedic	18
Gyno.*and curetted, etc.	24
Dental	23
General incisions; mostly minor operations	55
Total	221

X-Ray Department

X-ray examinations	171
Dental films used	51

Medical and Clerical—

Medical Officer (part time)	1
Clerk (Male)	1
	2

Nursing—

Matron	1
Head Nurse	1
Trained Nurses	5
Assistants in Nursing	3
	10

Attendants—

Indoor Attendant	1
Outdoor Attendant	1
	2

Domestic Staff—

Wardmaids and Housemaids	5
Housemaid—Part-time Cook	1
Cook	1
Laundress	1
	8

Total Authorised Staff 22

Staff Shortages on 31st December, 1947—

Nursing Staff	5
Domestic Staff	1

Throughout the year staff shortages were again very acute, the nursing staff being only half strength on 31st December, 1947. The daily average number of patients remains unaltered.

LEPER LAZARET.

Report on Leprosy in New South Wales for the Year Ended 31st December, 1947.

On 1st January, 1947, seventeen (17) persons remained under detention at the Lazaret.

No deaths occurred during 1947.

The total number of persons admitted since 1883, when patients were first received (though the notification of leprosy was first made compulsory and the detention of lepers provided for by law only towards the end of 1900), is 223. Distributed under nationalities, the account stands as follows at 31st December, 1947:—

	Ad- mitted.	Re-ad- mitted.	Dis- charged.	Repat- riated.	Died.	Remaining in at 31 Dec., 1947.
Whites, of European descent—						
New South Wales	...	...	...	...	...	4
Victoria	...	...	...	...	...	1
Queensland	...	...	...	...	...	1
Northern Territory	...	...	...	...	...	1
Western Australia	...	...	...	...	...	1
New Zealand	...	...	...	...	...	1
Fiji	...	...	...	...	...	...
England	...	...	...	...	...	...
Ireland	...	...	...	...	...	...
Scotland	...	...	...	...	...	...
Germany	...	...	...	...	...	...
Belgium	...	...	...	...	...	...
U.S. America	...	...	...	...	...	...
Greece	...	...	...	...	...	...
Malta	...	...	...	...	...	4
Sweden	...	...	...	...	...	...
France	...	...	...	...	...	...
Mauritius	...	...	...	...	...	...
Italy	...	...	...	...	...	...
Coloured patients—						
New South Wales	...	...	...	...	...	5
West Indies	...	...	...	...	...	...
India	...	...	...	...	...	1
China	...	...	...	...	...	...
Straits Settlements	...	...	...	...	...	...
Java	...	...	...	...	...	...
New Caledonia	...	...	...	...	...	...
Pacific Islands	...	...	...	...	...	...
Egypt	...	...	...	...	...	...
Zanzibar	...	...	...	...	...	...
Syria	...	...	...	...	...	...

Thus the number remaining in the Lazaret on 31st December, 1947, was seventeen persons: eleven males and six females.

Appendix A shows particulars of each case under detention since the year 1912.

Every opportunity has been offered to members of the medical profession to visit the Lazaret for the purpose of seeing such patients as were formerly under their care, or for study of the disease.

The following statements show the expenditure for the year, and the sources from which it has been defrayed:—

Statement showing the working expenses of the Lazarets (for men and for women) at Little Bay for the year 1947.

	£	s.	d.
Salaries	4,535	14	7
Provisions	2,335	8	1
Tobacco and comforts	237	8	7
Clothing	299	6	10
Fuel and light	315	12	10
Drugs, dressings, etc.	277	13	7
Miscellaneous	971	8	3
	8,972	12	9

Deduct amounts received in respect of maintenance, £5,972 12s. 9d., net cost £3,000.

Average number of patients resident, seventeen, being equal to an average of £527 16s. 1d. per inmate per annum in 1947.

STATISTICAL SUMMARY.

TABLE I.—Summary of Expenditure—State Hospitals and Homes Lidcombe, Liverpool and Newington, Waterfall Sanatorium, Strickland Convalescent Hospital, Randwick Auxiliary Hospital and David Berry Hospital, for the year ended 31st December, 1947.

Head of Expenditure.	Lidcombe.	Liverpool.	Newington.	Waterfall.	Strickland.	Randwick.	David Berry.	Total.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Salaries and Payments in the Nature of Salaries	84,891 16 10	34,186 7 0	27,851 19 6	26,048 6 7	4,791 17 2	34,209 15 10	4,646 2 1	216,626 5 0
Postal and Telegraphic	599 3 9	320 7 7	247 18 3	165 16 10	64 2 3	175 7 10	.....	1,572 16 6
Workers' Compensation Premiums	737 9 2	255 11 3	297 11 11	300 16 9	50 12 8	386 2 11	51 16 2	2,080 0 10
Gratuities to Inmates	4,558 17 2	4,406 4 0	2,554 4 8	2,226 10 0	273 13 0	263 7 7	.....	14,282 16 5
Provisions	37,303 9 2	18,093 17 7	15,418 0 9	17,856 16 3	2,632 12 6	7,834 5 11	844 14 7	99,983 16 9
Drugs, Dressings, Surgical Appliances, etc.	5,751 11 2	2,781 9 10	948 9 11	1,081 5 7	31 6 10	2,103 10 8	719 19 2	13,417 13 2
Fuel and Lighting	5,306 1 2	1,989 14 1	1,741 4 9	2,277 18 8	441 9 9	1,629 10 0	255 5 8	13,641 4 1
Forage	2,232 18 8	148 6 7	453 9 1	141 8 4	.....	67 14 7	498 10 2	3,043 17 3
Materials for Minor Repairs	1,538 14 0	670 9 10	755 7 8	676 9 10	37 1 8	369 11 0	.....	4,546 4 2
Additions and Renewals to Buildings and Plant	15,406 5 1	5,782 19 10	5,520 11 9	6,373 12 0	540 17 8	2,919 17 1	.....	36,544 3 5
Transport Expenditure, including Freight and Cartage	1,771 15 2	614 1 2	754 2 5	1,598 3 3	5 5 3	58 12 1	221 3 1	5,023 2 5
Clothing and Drapery	7,727 10 6	6,072 10 6	3,927 0 9	1,830 15 4	94 12 8	818 13 10	.....	20,471 3 7
Hardware, Ironmongery and General Stores	1,670 0 7	638 3 2	843 18 6	570 5 7	131 6 4	256 6 10	.....	4,110 1 0
Furniture	1,534 18 0	592 18 0	1,575 16 3	560 13 2	122 4 9	185 7 3	.....	4,621 17 5
Office Expenses	155 14 4	69 16 11	141 1 7	18 10 10	6 18 4	41 3 11	.....	433 5 11
Farm and Garden Requisites	234 12 0	48 15 10	47 9 4	23 0 8	10 5 9	.....	0 8 6	364 12 1
Sundry Expenses	1,174 14 3	171 16 6	255 13 2	459 9 5	145 11 10	1,256 0 6	584 4 3	4,047 9 11
Miscellaneous f (Dr.)	172,645 11 0	76,843 9 8	63,334 0 3	62,209 19 1	9,379 18 5	52,575 7 10	7,822 3 8	444,810 9 11
Miscellaneous (Cr.)	3,707 3 4	1,898 2 6	500 3 7	687 4 7	230 16 9	1 16 6	.....	338 19 5
Gross Expenditure	168,938 7 8	78,741 12 2	63,834 3 10	62,897 3 8	9,660 15 2	52,577 4 4	7,822 3 8	444,471 10 6
Add—Stock on Hand at 1st January, 1947	12,298 8 9	5,105 8 9	9,804 10 0	3,608 2 8	533 11 5	1,297 13 7	386 0 0	33,033 15 2
	181,236 16 5	83,847 0 11	73,638 13 10	66,505 6 4	10,194 6 7	53,874 17 11	8,208 3 8	477,505 5 8
Deduct—								
Stock on Hand 31st December, 1947	19,045 3 11	7,571 18 9	15,350 12 6	4,646 10 1	751 0 2	1,850 13 3	374 0 0	49,589 18 8
Proceeds of Sales	1,277 14 6	182 4 2	146 4 11	152 11 5	0 6 9	11 18 4	.....	1,771 0 1
Total Deductions	20,322 18 5	7,754 2 11	15,496 17 5	4,799 1 6	751 6 11	1,862 11 7	374 0 0	51,360 18 9
Total Cost of Maintenance	160,913 18 0	76,092 18 0	58,141 16 5	61,706 4 10	9,442 19 8	52,012 6 4	7,834 3 8	426,144 6 11
Average Daily Population	1,137	672	*476	†330	†81	§118	13	.....
Average Annual Cost per Inmate	£ s. d. 148 11 8	£ s. d. 117 3 6	£ s. d. 134 2 1	£ s. d. 190 11 11	£ s. d. 119 5 4	£ s. d. 445 11 5	£ s. d. 601 14 2	£ s. d.
Annual Contribution towards Maintenance	14,950 12 10	21,378 0 7	5,864 14 10	769 12 0	1,476 12 5	616 6 5	129 17 10	45,185 16 11

* Patients, 379—£168 8s. 7d.—or plus male inmate workers, 97—£134 2s. 1d. † Patients, 207—£303 17s. 0d.—or plus male inmate workers, 123—£190 11s. 11d. ‡ Patients, 64—£150 19s. 0d.—or plus male inmate workers, 17—£119 5s. 4d. § Patients, 107—£491 7s. 6d.—or plus male inmate workers, 11—£445 11s. 5d.

TABLE III.—Details of beds available and numbers of inmates and persons treated at State Hospitals and Homes of Lidcombe, Liverpool and Newington, Waterfall Sanatorium, Strickland Convalescent Hospital, Randwick Auxiliary Hospital and David Berry Hospital, for the year ended 31st December, 1947.

	Waterfall Sana- torium.	Liverpool.	Newington.	Lidcombe.	Strickland Convalescent Hospital.		David Berry Hospital.		Randwick Auxiliary Hospital.	
	No.	No.	No.	No.	Paticnts.	Inmate Workers.	Beds.	Cots.	No.	
(a) Beds—										
Hospital Division—										
Males	292	287	...	842	40	} 21	{ ...	...	46	
Females	176	...	334	...	70				59	
General Division—										
Males	129	444	...	649	...	...	...	...	...	
Females	19	...	248	...	...	...	...	...	...	
Total	616	731	582	1,491	110	21	32	4	105	
									Patients.	Inmate Workers.
(b) Patients—										
Total inmates on 31st December, 1946...	363	676	480	1,119	64	16	5		117	12
Admitted during year	759	2,388	627	(a) 2,862	793	1	477		103	11
Total	1,122	3,064	1,107	3,981	857	17	482		220	23
Discharged	782	2,019	588	1,857	794	...	447		51	12
Died	52	378	60	(a) 1,034	1	...	22		64	...
Total	834	2,397	648	2,891	795	...	469		115	11
Remaining in Hospital on 31st December, 1947.....	288	667	459	1,090	62	17	13		105	11
Daily average	330	672	476	1,137	64	17	13		107	11
Number of operations performed	...	78	...	116	...	...	221		180	...
(c) Outpatients—										
Number of individuals treated	52	3,841	...	...	...	...	200		75	...
Total number of attendances	64	20,442	...	...	...	...	329		1,036	...

(a) Includes 506 patients transferred to or from other sections.

SECTION IV.
PATHOLOGICAL LABORATORIES.

REPORT OF THE DIRECTOR OF PATHOLOGICAL LABORATORIES FOR THE YEAR 1947.

Director.—Ernest Leslie Morgan, M.B., Ch.M. (Syd.).
Assistant Director.—Keith Harvey Grieve, M.C., M.B. (Syd.).
Medical Officers.—Stanley W. M. King, L.R.C.P. (Lond.), M.R.C.S. (England). Alfred E. Gatenby, M.B., B.S. (Syd.), resigned 4/11/47. Walter H. Corbett, M.B., B.S. (Syd.). Farquhar W. Fraser, M.B., Ch.M. (Syd.), took up duty in this Laboratory on 29/9/47. David John Howell, M.B., B.S., 25/3/47.
Senior Microbiologist.—H. V. Justelius.
First Microbiologist.—L. H. Snell, A.S.T.C., A.A.C.I.
Microbiologists.—W. C. Thompson, Miss A. Playoust, B.Sc. (Syd.), A. P. Westwood, A.S.T.C., R. Truman, A.S.T.C.
Laboratory Assistants.—A. J. Williamson, J. Flynn, D. Croft (absent on extended study leave), B. Reimer (resigned 8/1/47), E. Jacob (absent on extended study leave), E. Horton, K. Fraser, J. F. Wills (commenced 5/5/47), D. Brown (commenced 13/1/47), Miss B. N. Bridge (resigned 10/6/47), Miss H. E. Parry (resigned 14/2/47), Miss M. Cridland (resigned 21/3/47), B. D. Hill (commenced 4/12/47), J. J. Firkin (appointed to staff vice Miss Playoust, who was absent on extended leave for a period of twelve months), re-appointed 28/7/47, J. B. Jones (commenced 15/12/47).
Cadet Laboratory Assistant.—B. O'Connor.
Clerks.—Miss N. E. Seahill, Miss E. Starr, Miss J. E. Barrett (commenced part-time duty in Laboratory on 30/6/47), 1 Messenger (temporary).
Attendants.—H. J. Moseley, A. V. Lynch, J. W. Foster, J. Fletcher, L. Hinds (appointed to Laboratory staff on 1/7/47).

SIR,
I have the honour to submit the following summarised Report, dealing with the work performed in the Microbiological Laboratory during 1947.

The amount of revenue collected from examinations, sales of broth and sera, etc., was £1,011 12s. 6d.
The total number of general laboratory examinations carried out during the year was 75,961. This represents a decrease in the number of examinations of 29,454 compared with the number of examinations carried out in 1946 but is in close agreement with the average number of examinations carried out in the previous five years.

The largest part of the decrease occurred in the number of specimens submitted for serological investigation and the various factors contributing to this decrease, together with variations in other figures, are mentioned under the appropriate headings.

Diphtheria.—Fewer swabbings for examination for diphtheria bacilli have been submitted during the year, the figures compared with those of the previous year being respectively 3,059 and 4,789—a decrease of 1,730.

Typhoid, Typhus and Undulant Fever.—The number of requests for examinations in connection with these diseases shows a slight tendency to increase but the variations are not significant.

Anthrax.—Five specimens were submitted during the year for examination for anthrax bacilli but all examinations yielded negative results.

Tuberculosis.—During the last five years, there has been a gradual reduction in the number of specimens of sputum submitted for examination for Tubercle Bacilli and at the present time the number examined is only about 33 per cent. of that of pre-war years. I understand that this has been brought about by the formation of additional Tuberculosis Dispensaries and Clinics, which undertake their own examinations.

Malaria.—The number of smears submitted for the detection of malarial parasites shows a sharp decline from 657 in 1946 to 173 in the present year. Of these, malarial parasites were found in seventy-one smears, sixty-nine being benign tertian parasites, while two were subtertian. This decrease in the incidence of malaria was expected as the disease would, naturally, tend to die out amongst the returned soldiers.

Syphilis and Gonorrhoea.—There has been a marked decrease in the number of serological tests for venereal diseases. Wassermann reactions, Kahn tests and Complement Deviation tests for gonorrhoea numbered 21,963, 21,158 and 4,571 respectively in 1947, compared with 32,208, 30,652 and 7,625 in 1946, being a reduction of 10,245 Wassermann reactions, 9,494 Kahn tests and 3,054 Complement Deviation tests. The present figure corresponds closely to the figures of 1941 to 1944. The figures

for 1945 and 1946 were unduly high, firstly, on account of the large numbers of pre-discharge tests carried out on service personnel, and secondly, on account of pre-natal tests carried out for a large Maternity Hospital. This latter hospital is now carrying out flocculation tests and only submitting sera with doubtful reactions for confirmatory tests. In 1946 this hospital submitted 8,624 specimens for serological tests compared with 366 in the present year.

The number of smears examined for Gonococci has also decreased from 14,783 in 1946 to 9,755 in 1947.

Milk.—The number of samples of milk submitted by the Milk Board for determination of bacterial content in 1947 was 1,816, compared with 1,326 in 1946. There has been no variation in the number of samples submitted for examination for Tubercle Bacilli and Brucella Abortus, 477 being submitted in both 1946 and 1947. One hundred and twenty-three guinea-pigs showed evidence of infection with Brucella Abortus and in two instances the guinea-pigs developed tuberculosis.

Biochemical Examinations.—As mentioned in my last report, additional headings have now been brought into use in the Biochemical section of the report, mainly to reduce the number of miscellaneous chemical examinations. The work in this section is steadily increasing, although there are variations in the number of individual examinations from year to year. The most marked decrease occurred in Test Meal examinations. In 1946 the Microbiological Laboratory carried out many of these tests for the Repatriation Department but towards the end of that year that Department succeeded in making arrangements for the work to be carried out in its own Laboratories and this Laboratory's figures consequently decreased.

Staff Changes.—The chief changes in the staff, including resignations and new appointments, have been shown at the beginning of this report.

Accommodation.—No additional space has been made available to the Laboratory for some years and I would again point out that the efficiency of the Laboratory is greatly hampered by the overcrowded working conditions.

TABLE showing the Routine Examinations made for the various Branches of the State Department of Public Health, other Government Departments, Subsidised Hospitals, etc.

	Number of Examinations Comparative Statement.	
	1946.	1947.
Department of Public Health—		
Head Office Submissions	31,407	24,668
David Berry Hospital	60	8
Lidcombe State Hospital and Home	1,879	1,636
Liverpool State Hospital and Home	188	229
Newington State Hospital and Home	42	9
Waterfall Sanatorium.....	77	16
Medical Officer of Health, Metropolitan District	2	7
Medical Officer of Health, Hunter River District	3	2
Randwick Auxiliary (Tuberculosis) Hospital...	817	143
Commonwealth Government	7,162	3,529
State Departments—		
Agriculture Department	...	...
Education Department	...	8
Child Welfare	...	20
Government Stores Department	...	...
Milk Board	1,803	2,316
Police Department	95	103
Prisons Department	1,108	795
Railway Department	3	17
Miscellaneous Government Departments	76	49
Private Practitioners	15,135	13,223
Public Hospitals and Institutions (other than State Hospitals)	32,827	14,305
Mental Hospitals	2,779	7,291
Municipal and Shire Councils	251	234
Rachel Florster Hospital	9,701	7,353
Total Examinations (General)	105,415	75,961
Rats for Plague	1,754	1,625
	107,169	77,586

In the following Statement the Routine Work is divided into sections to disclose the purposes for which the various examinations were made.

	Number of Examinations Comparative Statement.	
	1946.	1947.
A. MICROBIOLOGICAL EXAMINATIONS.		
1. Of materials from diseased persons and animals—		
Actinomycesis	5	...
Brucella Abortus	17	45
Diphtheria Swabbings	4,789	3,059
Diphtheria Toxicity	97	62
Dysentery	3	4
Gonorrhoea (smears and urine)	14,783	9,755
Gonorrhoea Complement Deviation Test	7,625	4,571
Haemolytic Streptococci	717	359
Hydatid (sputa, smears, etc.)	1	4
Hydatid (Complement Deviation Test)	31	38
Leprosy (Human)	80	102
Malaria	657	173
Meningitis	9	2
Syphilis (Wasserman Reactions)	32,208	21,963
Syphilis (Kahn)	30,652	21,158
Syphilis (Spirochaetes)	586	763
Tetanus	4	12
Tinea (Monilia, etc.)	5	9
Tuberculosis	1,692	948
Typhoid (Widal reaction)	55	49
Typhoid (Urine, Faeces)	47	57
Typhoid (Miscellaneous Water, milk, etc.) ...	...	11
Typhus (Weil Felix)	9	37
Unclassified : “ No growths ” from pus, etc....	795	385
Vincent's Angina.....	68	29
Rat Leprosy	1	4
Glandular Fever (Paul and Bunnell)	31	41
Paratyphoid A and B	...	25
2. Examinations for Anthrax—		
Human beings	...	5
Shaving brushes	...	...
Wool	...	...
3. Examinations of Materials, etc.—		
Chemical Closet Contents	...	2
Disinfectants (Rideal Walker)	7	3
Feathers	...	...
Soil	25	9
Water	205	227
Water from swimming baths	80	41
4. Examination of Foods for Bacterial Contamination—		
Bread, ice-cream, etc.	...	29
Milk samples submitted by the Milk Board for examination for Tubercle Bacilli and B. Abortus	477	477
Milk samples for Bacteriological count submitted by the Milk Board	1,326	1,816
Miscellaneous milks for Bacterial Counts, etc.	...	23
5. Examinations for Food Poisoning	...	18
B. PATHOLOGICAL EXAMINATIONS.		
1. Of animals—		
Mammals	...	...
Fish	...	...
2. Of Body Fluids—		
Blood for full and differential count	1,136	1,228
Blood for sedimentation rate	42	6
Miscellaneous examinations	...	9
Blood typing	2	4
Carried Forward.....	98,267	67,562

Statement of Routine Works—continued

	Number of Examinations Comparative Statement.	
	1946.	1947.
Brought Forward	98,267	67,562
Chemical Examinations—		
Blood for Sugar	54	59
Blood for sugar tolerance	175	259
Blood for urea estimation.....	151	131
Blood for creatinin	37	20
Serum acid phosphatase	73	160
Blood for cholesterol	...	68
Blood for fibrin, Globulin, albumen	...	59
Urine for sugar	108	50
Urine for urea.....	153	140
Test meal specimens	1,207	583
Calculus	20	9
Miscellaneous chemical examinations ...	1,415	254
Cell counts	...	539
Colloidal gold reaction	...	643
Protein, globulin and total protein	...	594
Takata ara	102	317
Chlorides	...	129
Miscellaneous cerebro spinal fluid exams.	...	24
Faeces	98	139
Urine (general examination)	190	389
3. Of Tissues for Histological Examination	2,749	2,575
C. EXAMINATION OF PARASITES.		
Ecto-parasites (fleas, ticks, etc.)	...	5
Endo-parasites (round and flat worms, etc.)	3	107
Protozoa	10	...
Insects (flies, mosquitoes)	...	...
D. MEDICO-LEGAL EXAMINATIONS.		
Examinations of exhibits for blood, seminal stains, etc.	111	103
E. EXAMINATION OF SPECIMENS FOR PREPARATION OF VACCINES AND MISCELLANEOUS EXAMINATIONS.		
Preparing of Autogenous vaccines from sputa, urine, aene pustules, boils, wounds and other septic conditions	477	413
Trichomonas	10	12
Lotions and mixtures	2	...
Utensil swabs	...	540
Weils disease	1	...
Miscellaneous (general)	...	69
Spermatozoa	1	9
	105,415	75,961

The following table indicates the Rats and Mice destroyed and examined at Sydney and Newcastle during the year ending 31/12/47.

	1947 Sydney.				1947 Newcastle.			
	R.R. Rattus.	Rattus Norregi- cus.	M. Muscu- lus.	Total.	R.R. Rattus.	Rattus Norregi- cus.	M. Muscu- lus.	Total.
January ...	29	3	116	148	3	10	...	13
February ...	34	118	3	155	33	9	...	12
March	37	100	12	149	...	...	...	...
April	37	71	14	122	...	1	...	1
May	54	86	7	147	1	7	...	8
June	51	96	4	151	1	...	...	1
July	55	91	11	157	...	3	...	3
August ...	61	84	6	131	...	...	...	...
September ...	42	86	5	133	...	...	...	...
October ...	16	40	...	56	2	3	...	5
November ...	48	58	5	111	1	1	...	2
December ...	58	56	1	115	2	3	...	5
Total ...	...	...	...	1,575	...	...	...	50

